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A Systematic Mapping Review of Health Promotion
and Well-being Concepts in Physical Therapy

by
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May 17, 2017

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ABSTRACT

BACKGROUND AND PURPOSE: The American Physical Therapy Association adopted the International Classification of Functioning, Disability, and Health (ICF) in 2008. ICF provided universal terminology for health professions, defined health in bio-psychosocial terms, and introduced neutral language and contextual influences on health (World Health Organization, 2001). The primary purpose of this study was to create a descriptive map of the physical therapy (PT) literature specific to the areas of health promotion (HP), prevention, and well-being and the use of ICF terminology. The secondary intent was to explore the status of research and topics of interest physical therapy pertaining to these areas.

METHODS: A systematic mapping review aims to evaluate the knowledge of or evidence for specific areas (Evidence for Policy and Practice Information Centre, 2010). It allows researchers to conduct an in-depth review and construct a descriptive map of the literature, gain an understanding of the state of affairs pertaining to scholarship of a particular concept or topic, and identify gaps and directions for future study (Grant & Booth, 2009). Comprehensive database searches were conducted using combinations of the search terms “physical therapy,” “health promotion,” “wellness,” and “well-being.” Ultimately, 132 articles met study criteria and were analyzed. A coding sheet was created using ICF terminology and tested for inter-rater reliability, and each article was reviewed. Articles were classified as primary prevention for healthy populations or secondary/tertiary prevention for those with a diagnosis. The coded articles were charted for further descriptive analysis and identification of themes.

RESULTS: Four major subcategories were identified in the articles: wellness, well-being, quality of life (QOL), or HP. The distribution of articles for well-being, wellness, and HP were fairly even for primary prevention, and only 10% of the articles involved QOL. However, the majority of articles related to secondary/tertiary prevention coded for well-being (48.4%) or QOL (45.3%). Both primary prevention and secondary/tertiary prevention articles most commonly coded for exercise (75% and 87.5, respectively) and mood (55% and 81%, respectively). Other recurring primary prevention article codes were balance (32%), musculoskeletal (29%), and neuromuscular (26%). Secondary/tertiary prevention articles had common codes of neuromuscular (53%), pain (50%), and mobility (47%).

CONCLUSIONS: The composition of PT literature on primary prevention in healthy individuals and secondary/tertiary prevention in individuals with diagnosis is markedly different. It appears that researchers associate HP and wellness with healthy populations, and QOL and well-being with populations with a diagnosis. The inconsistent and interchangeable use of language was a challenge for systematic analysis.

The undersigned certify that they have read, and recommended approval of the research project entitled...

A SYSTEMATIC MAPPING REVIEW OF HEALTH AND WELL-BEING CONCEPTS IN PHYSICAL THERAPY

**submitted by
Andrew Amundson
Jesse Klein
Bailey Ringold
Aaron This**

in partial fulfillment of the requirements for the Doctor of Physical Therapy Program

Primary Advisor Jyothi Gupta Date: May 19, 2017

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Chapter 1: INTRODUCTION

Over the past 25 years, the cost of healthcare in the United States has drastically increased from 700 billion dollars in 1990 to over 3.2 trillion dollars in 2015.¹ This cost accounts for 17.8% of the nation's gross domestic product and is expected to continue to increase at a rate of 5.8% a year until 2025.¹ Several efforts have been made to help combat the rising cost of healthcare in the US, and improve its overall effectiveness.¹

The Triple Aim developed in 2008 by the Institute for Healthcare Improvement (IHI), is an example of one of these efforts being made. Its intent was to improve upon the established methods of healthcare delivery and accomplish three objectives: improve the patient experience, improve overall population health, and reduce per capita cost.^{2,3} Additionally, The Patient Protection and Affordable Care Act of 2010 (ACA) outlined significant changes to the delivery and payment of health services. Among changes proposed by the ACA were provisions to provide funding to primary care services that promote prevention, wellness, and public health.² Many of these changes were intended to shift the focus of a 'sick care' system providing secondary and tertiary care services to healthcare encounters focused on well-being, prevention and primary care.

The International Classification of Functioning, Disability and Health (ICF), was introduced by the World Health Organization in 2001.⁴ The primary intent of the ICF was to develop a comprehensive biopsychosocial health model that was universally applicable, used neutral and positive language, and frame health in terms of functioning, rather than disease. This model also made explicit the contextual factors that are determinants of health that was missing in original models of the WHO. Health conditions may lead to impairments, activities limitations, and participation restrictions. In other words an individual's ability to fully

participate in life situations, regardless of functional limitations, impacts their quality of life and health status. Health-related concepts associated with the ICF model of relevance to this study are well-being and quality of life. The definitions for health-related concepts are highly varied in the literature, and their usage is problematic. This study uses the ICF model as the conceptual framework for health and health-related concepts and therefore adheres to its definitions.

The ICF views health as an asset, a resource for life, and is part of our understanding of well-being. The ICF model, unlike the medical model, makes it very clear that health is not simply determined biologically, but is also dependent on contextual factors, resulting in a more comprehensive biopsychosocial model of health, well-being and QOL.⁴ According to the ICF, well-being elements include health domains that are intrinsic to a person as well as those that are extrinsic, and is experienced by those both with or without a disability.⁵

In 2008, the American Physical Therapy Association (APTA) adopted the ICF model, and stated that the ICF language would be integrated into all documents and communication.⁵ As noted below,

‘The 2016 APTA Position Statement on Physical Therapists’ Role in Prevention, Wellness, Fitness, Health Promotion, and Management of Disease and Disability, the 1st role is to “integrate decision-making skills across all dimensions and contextual factors of the ICF.” ’

Although this statement clearly notes that physical therapy services are to include the dimensions and contextual factors as specified by the ICF, the language used in their position paper is not consistent with ICF. Of particular relevance to this research study, one notable inconsistency is that the ICF uses the term well-being, and nowhere does it mention the term wellness.

Prominent physical therapists in the United States in the realm of health promotion and

prevention continue to utilize wellness terminology rather than well-being.⁶ Additionally, many authors, within and outside of PT, use well-being and wellness interchangeably, rather than having discrete definitions of these distinct terms. Well-being and wellness are similar, but are not synonymous. They are distinct concepts. Wellness focuses on intrinsic, individual lifestyle choices, such as smoking cessation, sleep hygiene, and exercise behaviors, while well-being encompasses both intrinsic and extrinsic factors, placing an increased emphasis on personal, social and environmental factors. This is significant as individual changes may not be possible within the environmental or social contexts of an individual. Although researchers using wellness terminology acknowledge that environmental factors can influence an individual, the majority of interventional focus remains on changing the individual such as lifestyle choices and health behaviors. The distinction in the utilization of this language is important to relate research internationally and inter-professionally.

The catalyst for this study was the observation of the everyday use of wellness terminology in physical therapy education, official documents and literature that appears incompatible with the ICF. As wellness and well-being are conceptually distinct, and since the WHO uses well-being in all its official documents, this project was intended to map the utilization of the ICF language of well-being in the physical therapy literature.

The primary purpose of this study was to create a descriptive map of the physical therapy literature specific to the areas of the health-related concepts of health promotion, primary prevention and well-being, and the use of ICF terminology. The secondary intent was to explore the status of research and the topics of interest in physical therapy pertaining to the health-related concept of well-being.

Chapter 2: METHODS

A systematic mapping review was performed to examine the status of research being conducted in the physical therapy field regarding health promotion and concepts of well-being and wellness. Systematic mapping is a research method that summarizes and synthesizes the current state of an area of study, describing what the literature has to say over a broad subject of interest. It is different from a narrative literature review in that there is a quantitative and qualitative analysis of the literature whereby the literature is coded and the content analyzed. Systematic mapping does not attempt to answer a specific question about effectiveness as a systematic review does, but instead, collates, describes, and catalogues available evidence. The studies mapped can then be used to identify knowledge gaps, knowledge clusters, and evidence for policy-relevant questions.⁷

Literature searches were performed in the PsycINFO, Medline, and CINAHL databases with the following keywords: “physical therapy,” “health promotion,” “wellness,” and “well-being.” Articles in the study met the inclusion criteria of: being peer-reviewed, written in English, published between 2001 and 2015, and having “Wellness,” “Well-being,” and/or “Quality of Life” in either the title, keywords, or abstract. As the focus of the study was on peer-reviewed literature, sources that were narratives, book chapters, and dissertations were excluded from the study.

A visual representation of the search and methodological culling of articles is shown in Figure 1. The initial search resulted in 2,602 articles. 2,130 articles remained after duplicates were removed. 1,960 articles were then removed for lack of inclusion criteria. This left 170 articles appropriate for the next step of coding. The 170 files were separated into the categories of “Primary Prevention” (PP) and “Secondary/Tertiary Prevention” (STP) based on article

subjects. PP articles included healthy subjects whereas STP articles included subjects with existing medical conditions. Abstracts were reviewed to further screen articles for appropriateness. 6 non-applicable articles were filtered out during this stage, leaving 164 articles for full text screening and coding.

All articles were coded into categories of “Wellness,” “Well-being” including variations of spelling, “Quality of Life,” or “Health Promotion.” based on title, abstract, and keyword list. Articles without any explicitly stated keywords were coded generally under health promotion. Next, an article from each of the two prevention lists was chosen, read fully, and coded individually by researchers to compare inter rater coding. This was performed 3 times to test inter rater consistency as well as develop and finalize rubric components for coding and analysis.

A simplified version of the rubric is represented in Figure 2. Along with category codes, the rubric included sections for the variables and patient population descriptors as content codes. These 20 standardized content codes were based on ICF terminology and placed within the ICF subsections of Body Systems, Body Functions, and Activities and Participation. Each article was given the single most appropriate category code but could have multiple content codes. Other sections of the rubric included contextual factors, the study’s country of origin, and the author’s professional affiliation.

Following finalization of the rubric, full text screens were performed and rubrics completed for each of the 164 articles. Articles were read and coded by one reviewer before being read and coded by a second reviewer. Any coding discrepancies were discussed and agreed upon by the two reviewers. 33 articles were excluded during the full text screen stage. Reasons for exclusion were: articles being non-research, lack of full article access, and disconnect between database keywords and author keywords resulting in previous inclusion of inappropriate

articles.

Ultimately, 131 research articles were fully coded and analyzed; 67 PP and 64 STP. Once rubrics were completed, data was extracted and compiled to explore trends between variables and differences within the articles pertaining to their use of the ICF language.

Chapter 3: RESULTS

The category codes of “wellness”, “well-being”, “quality of life”, and “health promotion” were utilized differently between the PP and STP articles, shown in Graph 1 and Graph 2. The PP articles had relatively equal utilization of the terms “health promotion”, “well-being”, and “wellness” (31%, 29.5%, 29.5% respectively); while only 10% of the articles referred to quality of life. In the STP articles, “well-being” and “quality of life” were utilized most often (45%, 48% respectively), while “wellness” was only referenced in 5% of the articles and “health promotion” only in 2% (1 article). To summarize these differences; articles involving healthy subjects utilized the language “wellness”, “well-being” and “health promotion”. In contrast, the vast majority of articles concerning subjects with medically diagnosed conditions use the terms “quality of life” and “well-being”, while greatly reducing the utilization of the terms “wellness” and “health promotion”.

Content categories were created, mapped and compiled to explore what types of variables are incorporated in the mapped research. Of the all articles coded, the top ten content codes utilized are shown in Graph 3. Each category code is further broken down, displaying the contribution to the content code frequency made by both PP and STP. To further explore how the content codes varied between the PP and STP literature mapped, the top 5 content codes were graphed of the PP articles and also the STP articles, shown in graphs 4 and 5, respectively. The

top 5 content codes for the articles concerning healthy subjects were exercise, mood, balance, the musculoskeletal body system, and the cardiovascular system. STP data are included for comparison in these content areas. In contrast, the top 5 content codes in articles concerning medically diagnosed subjects were exercise, mood, neuromuscular system, pain and mobility.

While all of the coded articles mentioned physical therapy within their title, abstract, or keywords, as part of our inclusion criteria, they were not all written by or with physical therapists. Graph 6 shows the percentages of coded articles that were written by only physical therapists (30%), physical therapists along with other professionals (29%), and finally those articles which were written without a physical therapist (41%). The other professions most often authoring these papers included various physician specialties, nursing, occupational therapy, psychology, and public health. 4 of the total coded articles were unable to determine the professions of the authors.

Chapter 4: DISCUSSION

This is the first study to systematically map the health-related concepts of health promotion and well-being in the physical therapy literature. As previously noted, there were substantial differences between research on healthy individuals and those with conditions or diseases.

Category Codes

Health promotion was the category code assigned in approximately $\frac{1}{3}$ of the articles on PP, while it was only found in 2% of STP articles. The question to be asked, then, is why individuals with a diagnosis are not being targeted for health promotion as frequently as those

that are healthy. The intent of health promotion is to minimize risk factors for diseases; but those with a diagnosis are also at risk of either worsening symptoms or the development of other medical conditions. The frequent use of the term wellness in the physical therapy literature on PP is indicative of the focus on health promotion in healthy persons and the importance of the functioning of body structures and systems, rather than the whole person in the context of their lives. In other words, a healthy body seems to be associated with wellness.

For individuals with a diagnosis, the focus shifted to well-being and quality of life, with wellness being minimally present. Well-being was present as frequently as quality of life in STP, while it was much more prevalent than quality of life in PP. Quality of life was present in almost half of all STP articles, while, in PP, it was the least commonly found category code. This may indicate an assumption that healthy individuals already have high quality of life, and that those with a disease have lower quality of life that requires intervention through management of their condition. Perhaps authors choose to focus on disease management to promote well-being and quality of life in STP. In this context, health and wellness are not associated with individuals that have a diagnosis.

Despite the intents of the ICF, it appears that physical therapy may still be focused on the medical view of health, with a diagnosis defining an individual, rather than taking a whole-person approach. The fact that wellness and well-being have been equally utilized in research on healthy populations may perhaps indicate that researchers perceive wellness and well-being as the same construct.

Content Codes

Since all the articles mapped pertained to physical therapy with content or author-

assigned keywords, due to our inclusion criteria, it is no surprise that exercise was the most coded content code overall. In both healthy populations and those with a diagnosis, exercise and mood were the two most prevalent content codes. This indicates that, regardless of health or disease state, the literature identifies these two components as being broadly necessary factors of well-being. However, notable differences between PP and STP were present beyond the top two content codes. In regards to PP, the remaining three of the top five codes were balance, the musculoskeletal system, and the cardiovascular system. In many articles, the focus of PP is improving health by increasing physical activity, primarily through exercise.

In research on STP, the other top content codes were the neuromuscular system, pain, and mobility. The prevalence of the neuromuscular code is a reflection of the most common diagnoses studied being neuromuscular in nature. Pain and mobility were likely prevalent as they are two commonly assessed variables in QOL outcome measures. Here, the purpose of exercise was often symptom management and enhanced function.

ICF Implications

The study findings confirmed that there are issues with the application of these health-related concepts. The original purpose of the ICF model was to develop a universal language across countries and professions. However, based on the results of this study, this has yet to occur in physical therapy with regards to use of the terminology of well-being versus wellness. This is exemplified by the finding that well-being is the term of choice for studies performed by researchers from other disciplines that are not affiliated with physical therapy. Moreover, physical therapy researchers outside of the United States also utilize the term “well-being.” However, “wellness” is the term primarily utilized by physical therapy researchers within the

United States.

The APTA adopted the ICF model 8 years ago, but there does not yet seem to be any movement towards a change in language in the physical therapy literature, defeating a main purpose of utilizing the ICF model. Overall, it appears that other professions seem to be doing more in the area of health promotion and prevention research. Perhaps physical therapy is just beginning to make progress in these areas and the literature on these topics will grow in the future.

Study Limitations

One limitation of this study was that the inconsistent and interchangeable use of language posed a challenge for systematic analysis. Terms such as wellness, well-being, health, and quality of life have many definitions and are used variably in the literature. Another limitation is that this study may be limited in international articles, as the mapping did not include articles that were not written in or translated to English. Finally, a non-standardized assessment tool was created and utilized to code the articles, as the systematic mapping as a method of study has only recently started to be utilized.

Future Research

The results of this systematic mapping provide many directions for future research. It is firstly important to continue delving into the data from this study to further explore trends in health promotion and well-being concepts within the physical therapy literature. The current data lends itself to extensive analysis in a variety of ways. Specific points of interest include looking more closely at interventions and outcome measures individually, the prevalence of well-being

versus wellness in studies authored by physical therapists in conjunction with other professions, and whether or not the use of ICF terminology has increased at all since the APTA adoption of ICF framework in 2008. Wellness terminology is still being used, but the extent of changes that the adoption of the ICF has made on research terminology is unclear.

Implications for PT Practice

The results of this study have multiple implications for physical therapy practice. First, consistent use of language, in line with the ICF model, is necessary for physical therapy to be recognized by other disciplines and policy-makers as contributing to health promotion and enhancing the well-being of individuals and populations. Additionally, well-being has been studied and many standardized measures are routinely used for policy making and as an indicator of national health. It is possible that, by using wellness, research in this field by physical therapists in the United States is not being found in literature searches by other disciplines. Of concern is that exercise, falls prevention, mobility, and activities that are within the scope of physical therapy are also within the scope of practice of other professions. The physical therapy profession must therefore identify its unique role in prevention and health promotion.

In addition to this role identification, the social responsibilities of the physical therapy profession must include looking at communities and the contextual factors that contribute to health and well-being. Health promotion requires health-supporting environments, and cannot be achieved by targeting individual behaviors alone for sustained behavioral change.

Chapter 5: CONCLUSION

This study findings reveal the need for the Physical Therapy profession to align language in its official documents with the ICF. This will not only bring the profession in sync with others

including medicine but also clarify the conceptual anomalies and murkiness prevalent in the literature.

REFERENCES

1. National Health Expenditure Data. Centers for Medicare & Medicaid Services website. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/index.html>. Updated December 2, 2016. Accessed December 5, 2016.
2. The IHI Triple Aim. The Institute for Healthcare Improvement website. <http://www.ihl.org/engage/initiatives/TripleAim/Pages/default.aspx>. Accessed December 5, 2016.
3. Read the Law. U.S. Department of Health & Human Services website. <https://www.hhs.gov/healthcare/about-the-law/read-the-law/index.html> Content last reviewed on August 28, 2015. Accessed December 5, 2016.
4. World Health Organization (WHO). Towards a Common Language for Functioning, Disability and Health: ICF. 2002. Retrieved from <http://www.who.int/classifications/icf/icfbeginnersguide.pdf?ua=1>. Accessed November 19, 2016.
5. American Physical Therapy Association (APTA). International Classification of Functioning, Disability and Health (ICF). 2013. <http://www.apta.org/ICF/>. Accessed November 19, 2016.
6. Bezner JR. Promoting health and wellness: Implications for physical therapist practice. *Physical Therapy*. 2015; 95(10): 1433-1444. doi: 10.2522/ptj.20140271.
7. Grant, M. J., & Booth, A. A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Information & Libraries Journal*. 2009; 26(2), 91-108.

APPENDIX A

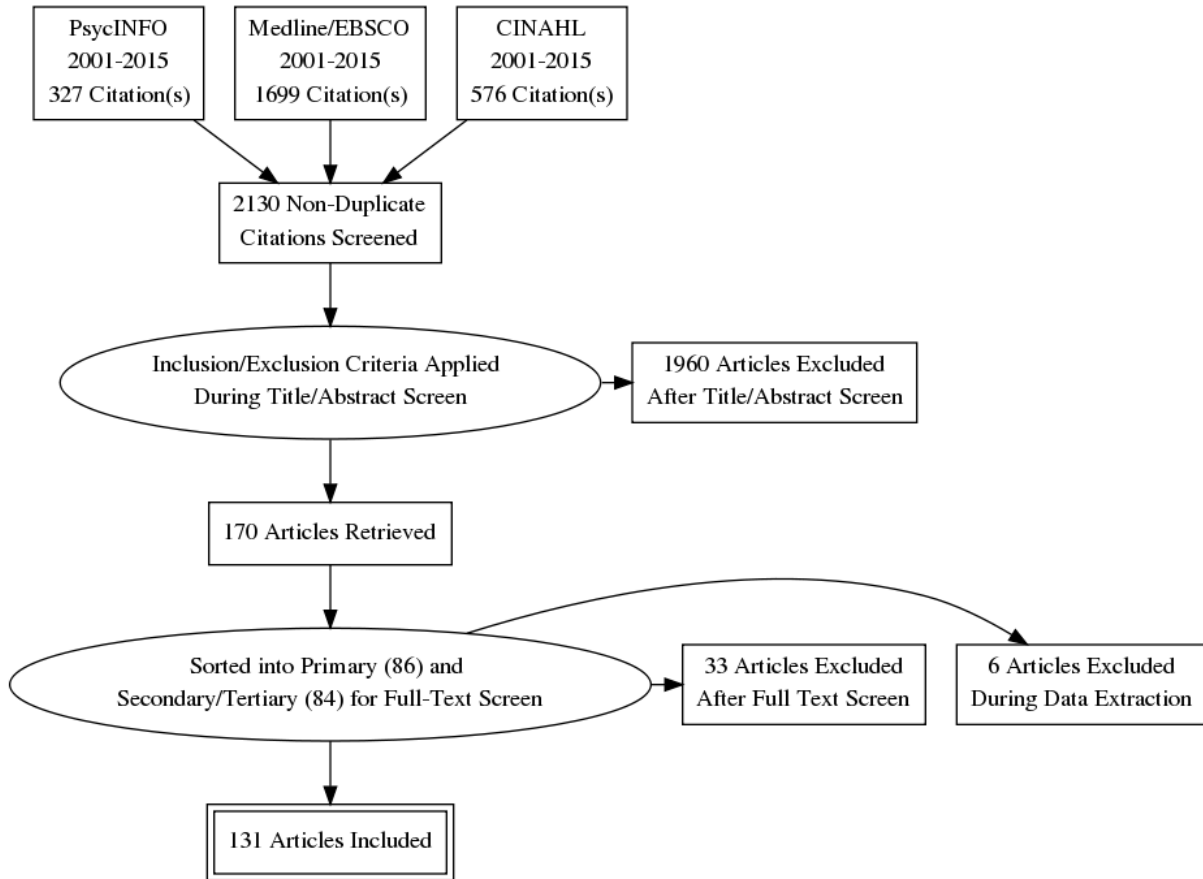
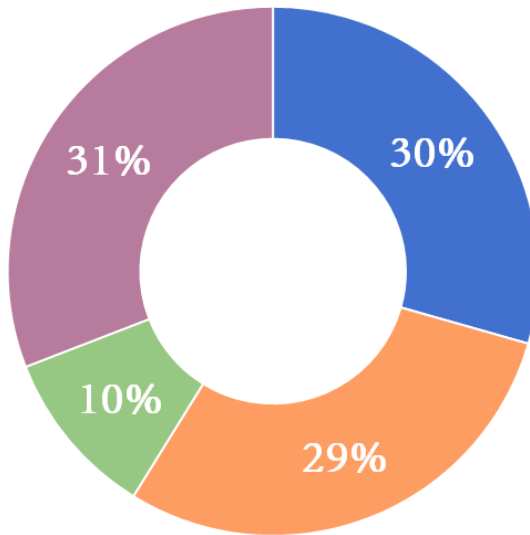


Figure 1. Flow Chart Representative of Culling Process - Articles were retrieved from three databases and underwent multiple rounds of culling until 131 articles remained for analysis. Articles in the study met the inclusion criteria of: being peer-reviewed, written in English, published between 2001 and 2015, and having “Wellness,” “Well-being,” and/or “Quality of Life” in either the title, keywords, or abstract.

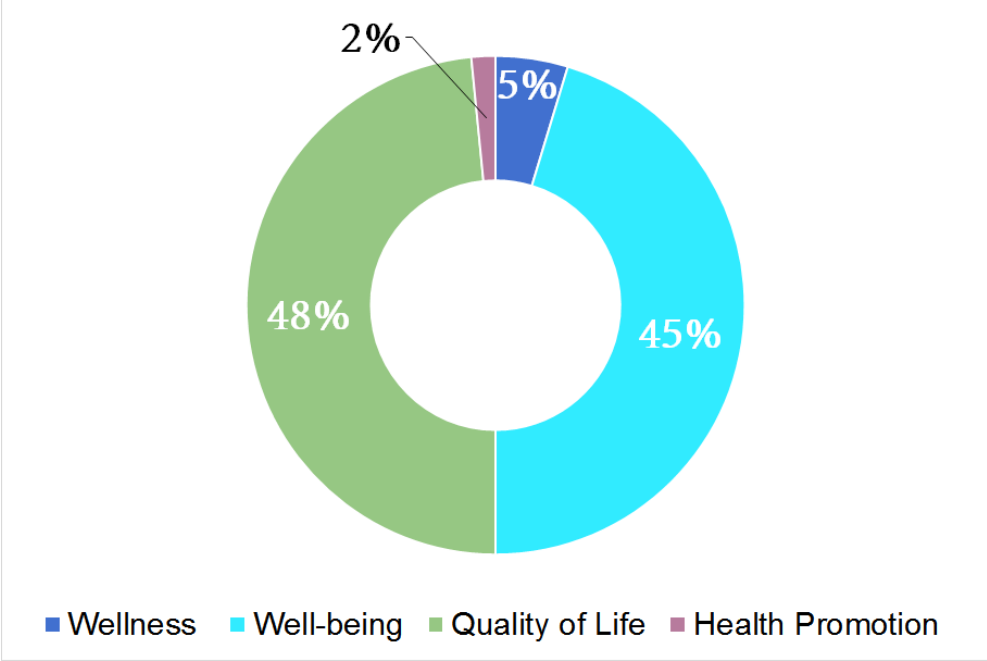
ID: 152		
Categorical Code	QOL	
Type of Prevention	Secondary/Tertiary	
Content Codes	Body Systems Addressed?	Respiratory
	Body Function Addressed?	Pain, mood, fatigue, mental function
	Activities & Participation Addressed?	Mobility, exercise
Country of Origin	Canada	
Author Affiliation	Pharmacist, MD, nurse	
Purpose	To assess the effects of Iyengar yoga on HRQOL, including fatigue, anxiety, depression, and overall well-being.	
Outcome Measures Used	HRQOL: Chronic Respiratory Questionnaire, Hospital Anxiety and Depression Scale, Health Utilities Index, 6MWT (functional mobility), survey of class, journal entries	
Core Findings	Improvements in anxiety, fatigue, pain emotion, ambulation, overall HADS scores. Improved breathing capacity, sleep, mobility, energy reported. → IY has significant potential to improve HRQOL in pre-lung transplant pts	

Figure 2. Simplified Coding Rubric - This is a simplified version of the rubric that was utilized for each mapped article during the coding processes. The figure displays the sample completion for different coding categories.

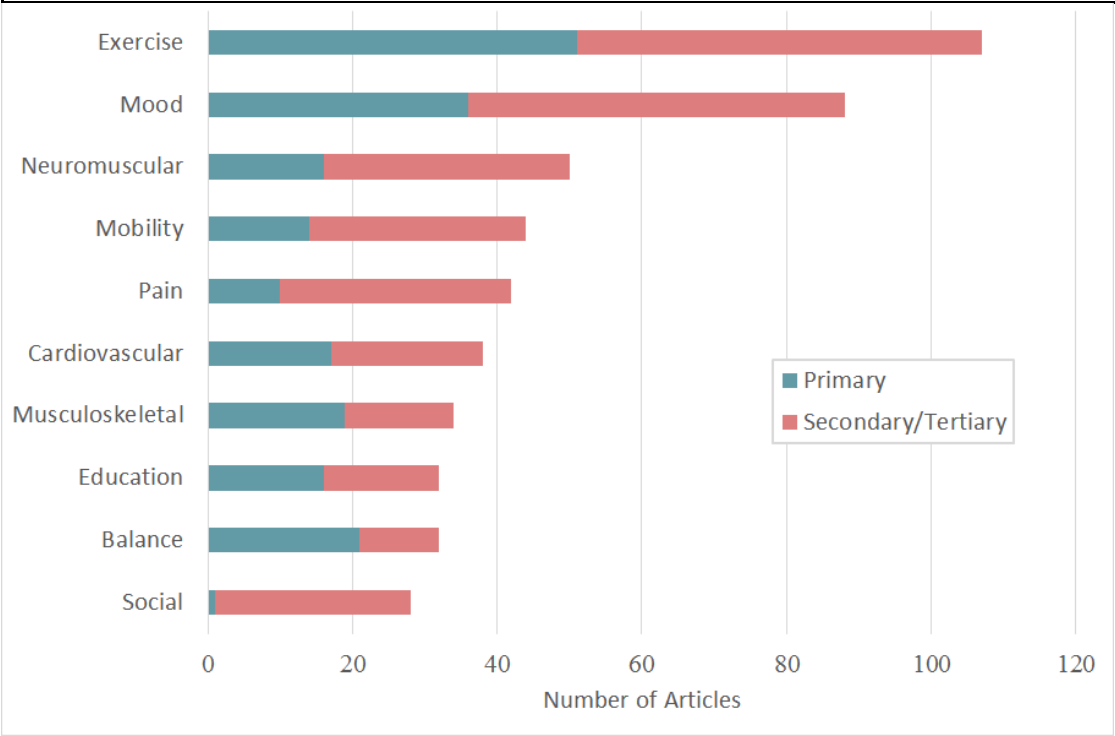


■ Wellness ■ Well-being ■ Quality of Life ■ Health Promotion

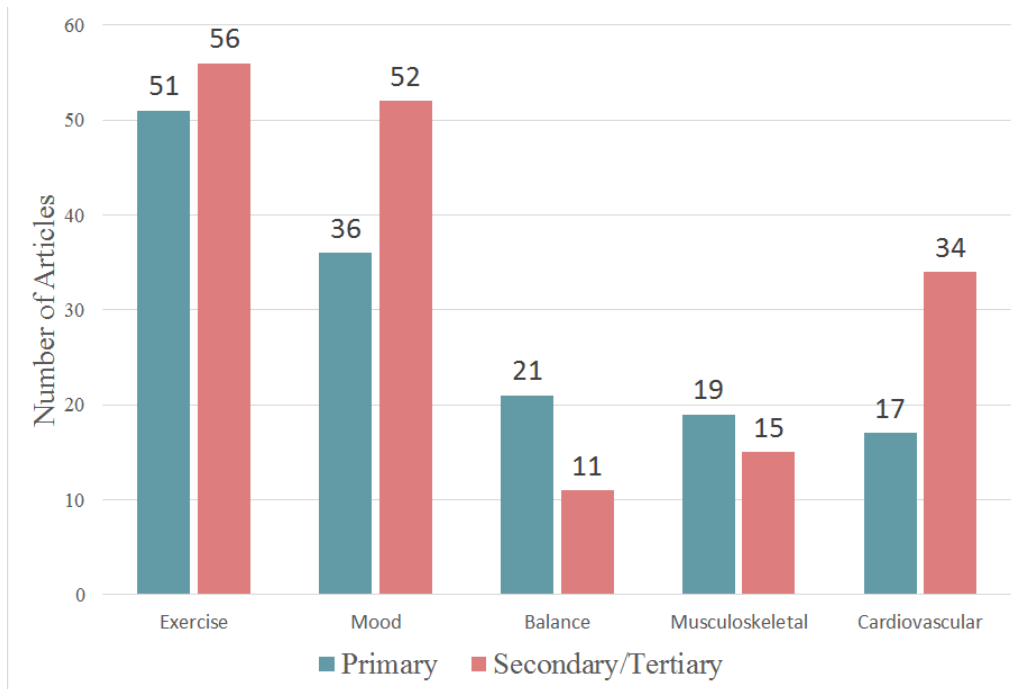
Graph 1. Distribution of Category Codes for Primary Articles



Graph 2. Distribution of Category Codes for Secondary/Tertiary Articles



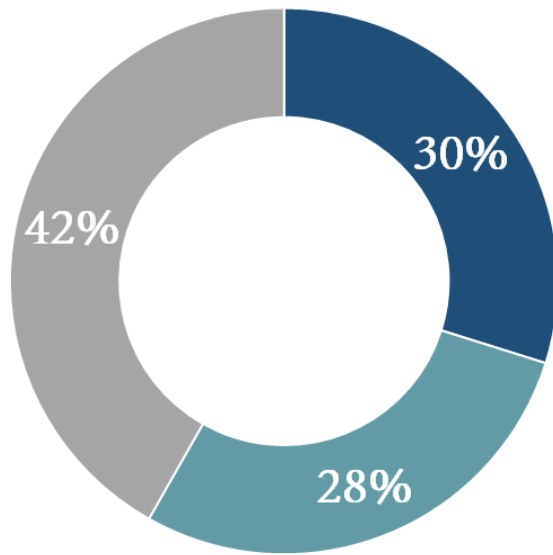
Graph 3. Top Ten Content Codes for All Articles



Graph 4. Top Ten Content Codes for Primary Articles - secondary/tertiary content codes are displayed in red for comparison.



Graph 5. Top Ten Content Codes for Secondary/Tertiary Articles - primary content codes are displayed in blue for reference.



■ Physical Therapists ■ Physical Therapists + Other ■ Other

Graph 7. Distribution of Article Professional Affiliation

APPENDIX B: Primary Prevention Resources

1. Batson, G., Feltman, R., McBride, C., & Waring, J. (2007). Effect of mental practice combined with physical practice on balance in the community-dwelling elderly. *Activities, Adaptation & Aging, 31*(2), 1-18.
2. Beets, M. W., & Pitetti, K. H. (2004). One-mile Run/Walk and body mass index of an ethnically diverse sample of youth. *Medicine & Science in Sports & Exercise, 36*(10), 1796-1803.
3. Beets, M. W., Pitetti, K. H., & Forlaw, L. (2007). The role of self-efficacy and referent specific social support in promoting rural adolescent girls' physical activity. *American Journal of Health Behavior, 31*(3), 227-237.
4. Black, M. M., Hager, E. R., Le, K., Anliker, J., Arteaga, S. S., DiClemente, C., Wang, Y. (2010). Challenge! health promotion/obesity prevention mentorship model among urban, black adolescents. *Pediatrics, 126*(2), 280-288.
5. Borstad, J. D., Buetow, B., Deppe, E., Kyllonen, J., Liekhus, M., Cieminski, C. J., & Ludewig, P. M. (2009). A longitudinal analysis of the effects of a preventive exercise programme on the factors that predict shoulder pain in construction apprentices. *Ergonomics, 52*(2), 232-244.
6. Butler, C. E., Clark, B. R., Burlis, T. L., Castillo, J. C., & Racette, S. B. (2015). Physical activity for campus employees: A university worksite wellness program. *Journal of Physical Activity & Health, 12*(4), 470-476.
7. Cardon, G. M., Van Acker, R., Seghers, J., De Martelaer, K., Haerens, L. L., & De Bourdeaudhuij, I. M. M. (2012). Physical activity promotion in schools: Which strategies do schools (not) implement and which socioecological factors are associated with implementation? *Health Education Research, 27*(3), 470-483.
8. Chen, K., Tseng, W., Ting, L., & Huang, G. (2007). Development and evaluation of a yoga exercise programme for older adults. *Journal of Advanced Nursing, 57*(4), 432-441.
9. Cipriano, G., Jr, Neves, L. M. T., Cipriano, G. F. B., Chiappa, G. R., & Borghi-Silva, A. (2014). Cardiovascular disease prevention and implications for worksite health promotion programs in brazil. *Progress in Cardiovascular Diseases, 56*(5), 493-500.
10. Costello, E., Leone, J. E., Ellzy, M., & Miller, T. A. (2013). Older adult perceptions of the physicians' role in promoting physical activity. *Disability and Rehabilitation: An International, Multidisciplinary Journal, 35*(14), 1191-1198.
11. Dressendorfer, R. H., Raine, K., Dyck, R. J., Plotnikoff, R. C., Collins-Nakai, R. L., McLaughlin, W. K., & Ness, K. (2005). A conceptual model of community capacity development for health promotion in the alberta heart health project. *Health Promotion Practice, 6*(1), 31-36.
12. Gardner, J., Dong-Olson, V., Castronovo, A., Hess, M., & Lawless, K. (2012). Using wellness recovery action plan and sensory-based intervention: A case example. *Occupational Therapy in Health Care, 26*(2-3), 163-173.
13. Gopaul, K., & Connelly, D. M. (2012). Fall risk beliefs and behaviors following a fall in community-dwelling older adults: A pilot study. *Physical & Occupational Therapy in Geriatrics, 30*(1), 53-72.
14. Ho, L. S., Gittelsohn, J., Rimal, R., Treuth, M. S., Sharma, S., Rosecrans, A., & Harris, S. B. (2008). An integrated multi-institutional diabetes prevention program improves

- knowledge and healthy food acquisition in northwestern ontario first nations. *Health Education & Behavior*, 35(4), 561-573.
15. Jacobs, K., Zhu, L., Dawes, M., Franco, J., Huggins, A., Igari, C., . . . Amarachi, U. (2011). Wii health: A preliminary study of the health and wellness benefits of wii fit on university students. *The British Journal of Occupational Therapy*, 74(6), 262-268.
 16. Lam, J., Liamputtong, P., & Hill, K. (2015). Falls, falls prevention and the role of physiotherapy and exercise: Perceptions and interpretations of italian-born and australian-born older persons living in australia. *Journal of Cross-Cultural Gerontology*, 30(2), 233-249.
 17. Lin, S., Lee, J. W., Modeste, N., & Johnson, E. G. (2012). Attitudes and beliefs predicting taiwanese older adults' intentions to attend strength and balance training programs. *Journal of Applied Gerontology*, 31(2), 260-281.
 18. Pai, Y., Bhatt, T., Yang, F., & Wang, E. (2014). Perturbation training can reduce community-dwelling older adults' annual fall risk: A randomized controlled trial. *The Journals of Gerontology: Series A: Biological Sciences and Medical Sciences*, 69A(12), 1586-1594.
 19. Price, A. E., Greer, B., & Tucker, A. (2013). Older black women's experiences initiating and maintaining physical activity: Implications for theory and practice. *Journal of Aging and Physical Activity*, 21(3), 348-366.
 20. Roopchand-Martin, S., McLean, R., Gordon, C., & Nelson, G. (2015). Balance training with wii fit plus for community-dwelling persons 60 years and older. *Games for Health*, 4(3), 247-252.
 21. Seymour, C. J., & Cannon, S. (2010). Student-facilitated health promotion intervention for chronic disease self-management in at-risk elders. *Journal of Allied Health*, 39(2), 120-127.
 22. Shirazi, K. K., Wallace, L. M., Niknami, S., Hidarnia, A., Torkaman, G., Gilchrist, M., & Faghihzadeh, S. (2007). A home-based, transtheoretical change model designed strength training intervention to increase exercise to prevent osteoporosis in iranian women aged 40-65 years: A randomized controlled trial. *Health Education Research*, 22(3), 305-317.
 23. Siu, K., Rajaram, S. S., & Padilla, C. (2015). Impact of psychosocial factors on functional improvement in latino older adults after tai chi exercise. *Journal of Aging and Physical Activity*, 23(1), 120-127.
 24. Trudelle-Jackson, E., Jackson, A. W., & Morrow, J. R., Jr. (2011). Relations of meeting national public health recommendations for muscular strengthening activities with strength, body composition, and obesity: The Women's injury study. *American Journal of Public Health*, 101(10), 1930-1935.
 25. van Dijk, G. P., Lenssen, A. F., Leffers, P., Kingma, H., & Lodder, J. (2013). Taekwondo training improves balance in volunteers over 40. *Frontiers in Aging Neuroscience*, 5.
 26. Wallmann, H., Schuerman, S., Kruskall, L., & Alpert, P. T. (2009). Administration of an exercise regimen in assisted-living facilities to improve balance and activities of daily living. A pilot study. *Home Health Care Management & Practice*, 21(6), 419-426.
 27. Wellman, N. S., Kamp, B., Kirk-Sanchez, N. J., & Johnson, P. M. (2007). Eat better and move more: A community-based program designed to improve diets and increase physical activity among older americans. *American Journal of Public Health*, 97(4), 710-717.

28. Bacsu, J., Jeffery, B., Novik, N., Abonyi, S., Oosman, S., Johnson, S., & Martz, D. (2014). Policy, community and kin: Interventions that support rural healthy aging. *Activities, Adaptation & Aging, 38*(2), 138-155.
29. Baker, M. K., Kennedy, D. J., Bohle, P. L., Campbell, D. S., Knapman, L., Grady, J., . . . Fiatarone Singh, M. A. (2007). Efficacy and feasibility of a novel tri-modal robust exercise prescription in a retirement community: A randomized, controlled trial. *Journal of the American Geriatrics Society, 55*(1), 1-10.
30. Bilderbeck, A. C., Farias, M., Brazil, I. A., Jakobowitz, S., & Wikholm, C. (2013). Participation in a 10-week course of yoga improves behavioural control and decreases psychological distress in a prison population. *Journal of Psychiatric Research, 47*(10), 1438-1445.
31. Chin A Paw, ,M.J.M., de Jong, N., Schouten, E. G., van Staveren, ,W.A., & Kok, F. J. (2002). Physical exercise or micronutrient supplementation for the WELLBEING of the frail elderly? A randomised controlled trial. *British Journal of Sports Medicine, 36*(2), 126-131.
32. Compare, A., Zarbo, C., Marín, E., Meloni, A., Rubio-Arias, J., Berengüí, R., . . . Alcaraz, P. E. (2014). PAHA study: Psychological active and healthy aging: Psychological wellbeing, proactive attitude and happiness effects of whole-body vibration versus multicomponent training in aged women: Study protocol for a randomized controlled trial. *Trials, 15*, 177-177.
33. Conradsson M, Littbrand H, Lindelf N, Gustafson Y, Rosendahl E. Effects of a high-intensity functional exercise programme on depressive symptoms and psychological well-being among older people living in residential care facilities: A cluster-randomized controlled trial. *AGING MENT HEALTH. 2010;14*(5):565-576.
34. Davis JC, Bryan S, Li LC, et al. Mobility and cognition are associated with wellbeing and health related quality of life among older adults: A cross-sectional analysis of the vancouver falls prevention cohort. *BMC Geriatr. 2015;15*:75-75.
35. De Blecourt ACE, Preuper HRS, Van Der Schans CP, Groothoff JW, Reneman MF. Preliminary evaluation of a multidisciplinary pain management program for children and adolescents with chronic musculoskeletal pain. *Disabil Rehabil. 2008;30*(1):13-20.
36. Dossa A, Capitman JA. Community-based disability prevention programs for elders: Predictors of program completion. *Journal of Gerontological Social Work. 2010;53*(3):235-250.
37. Evans S, Tsao JCI, Sternlieb B, Zeltzer LK. Using the biopsychosocial model to understand the health benefits of yoga. *J COMPLEMENT INTEGR MED. 2009;6*(1):22.
38. Frazee SL. *Identification, assessment and reduction of fall risks in a community dwelling older adult: A case report*. Florida Gulf Coast University, ProQuest Dissertations Publishing, 2014.
39. Gaitan-Sierra C, Hyland ME. Nonspecific mechanisms that enhance well-being in health-promoting behaviors. *Health Psychol. 2011;30*(6):793-796.
40. Hamed R, Tariah HA, Hawamdeh ZM. Personal factors affecting the daily functioning and WELL-BEING of patients with multiple sclerosis using the international classification of functioning model: A qualitative study. *International Journal of Mental Health. 2012;41*(4):47-61.

41. Hillert L, Savlin P, Berg AL, Heidenberg A, Kolmodin-Hedman B. Environmental illness -- effectiveness of a salutogenic group-intervention programme. *Scand J Public Health*. 2002;30(3):166-175.
42. Kloseck M, Hobson S, Crilly R, Vandervoort A, Ward-Griffin C. The influence of personality on falling and engagement in daily activities by community-dwelling older adults. *Physical & Occupational Therapy in Geriatrics*. 2007;26(1):1-17.
43. Puig-Ribera A, Martínez-Lemos I, Giné-Garriga M, et al. Self-reported sitting time and physical activity: Interactive associations with mental well-being and productivity in office employees. *BMC Public Health*. 2015;15:72-72.
44. Sjogren T, Nissinen KJ, Jarvenpaa SK, Ojanen MT, Vanharanta H, Malkia EA. Effects of a physical exercise intervention on subjective physical well-being, psychosocial functioning and general WELL-BEING among office workers: A cluster randomized-controlled cross-over design. *Scand J Med Sci Sports*. 2006;16(6):381-390.
45. Tetlie T, Eik-Nes N, Palmstierna T, Callaghan P, Nøttestad J,A. The effect of exercise on psychological & physical health outcomes: Preliminary results from a norwegian forensic hospital. *J Psychosoc Nurs Ment Health Serv*. 2008;46(7):38-43.
46. Tse MMY, Tang SK, Wan VTC, Vong SKS. The effectiveness of physical exercise training in pain, mobility, and psychological well-being of older persons living in nursing homes. *PAIN MANAGE NURS*. 2014;15(4):778-788.
47. Breivte MH, Hynninen MJ, Kvale A. The effect of psychomotor physical therapy on subjective health complaints and psychological symptoms. *Physiother Res Int*. 2010;15(4):212-221.
48. Cruz-Ferreira A, Fernandes J, Gomes D, et al. Effects of pilates-based exercise on life satisfaction, physical self-concept and health status in adult women. *Women Health*. 2011;51(3):240-255.
49. Fernros L, Furhoff A, Wändell P,E. Improving quality of life using compound mind-body therapies: Evaluation of a course intervention with body movement and breath therapy, guided imagery, chakra experiencing and mindfulness meditation. *Qual Life Res*. 2008;17(3):367-376.
50. Langlois F, Vu TTM, Chassé K, Dupuis G, Kergoat M, Bherer L. Benefits of physical exercise training on cognition and quality of life in frail older adults. *J Gerontol B Psychol Sci Soc Sci*. 2013;68(3):400-404.
51. Morey MC, Pieper CF, Edelman DE, et al. Enhanced fitness: A randomized controlled trial of the effects of home-based physical activity counseling on glycemic control in older adults with prediabetes mellitus. *J Am Geriatr Soc*. 2012;60(9):1655-1662.
52. Tamari K, Kawamura K, Sato M, Harada K. Health education programs may be as effective as exercise intervention on improving health-related quality of life among japanese people over 65 years. *Australasian Journal on Ageing*. 2012;31(3):152-158.
53. Teixeira-Salmela LF, Santiago L, Lima RCM, Lana DM, Camargos FFO, Cassiano JG. Functional performance and quality of life related to training and detraining of community-dwelling elderly. *Disability and Rehabilitation: An International, Multidisciplinary Journal*. 2005;27(17):1007-1012.
54. Boll M, Boström-Lindberg E. Physiotherapists' understanding and approach to health promotion work in compulsory school: Perceiving and supporting coherence. *Physiother Theory Pract*. 2010;26(5):318-326.

55. de Heer HD, Koehly L, Pederson R, Morera O. Effectiveness and spillover of an after-school health promotion program for hispanic elementary school children. *Am J Public Health*. 2011;101(10):1907-1913.
56. de la Haye K, de Heer HD, Wilkinson AV, Koehly LM. Predictors of parent–child relationships that support physical activity in Mexican–American families. *J Behav Med*. 2014;37(2):234-244.
57. Dwyer JJM, Allison KR, Goldenberg ER, Fein AJ, Yoshida KK, Boutilier MA. Adolescent girls' perceived barriers to participation in physical activity. *Adolescence*. 2006;41(161):75-79.
58. S, Liira H, Leppävuori J, Remes-Lyly T, Tikkanen H, Pitkälä K. Effectiveness of exercise intervention and health promotion on cardiovascular risk factors in middle-aged men: A protocol of a randomized controlled trial. *BMC Public Health*. 2013;13:125-125.
59. Gothe NP, Wójcicki T,R., Olson EA, et al. Physical activity levels and patterns in older adults: The influence of a DVD-based exercise program. *J Behav Med*. 2015;38(1):91-97.
60. Greer AE, Marcello R, Graveline R. Community members' assessment of the physical activity environments in their neighborhood parks: Utility of the community stakeholder park audit tool. *Health Promotion Practice*. 2015;16(2):202-209.
61. Laforest S, Pelletier A, Gauvin L, et al. Impact of a community-based falls prevention program on maintenance of physical activity among older adults. *J Aging Health*. 2009;21(3):480-500.
62. Mayer JM, Quillen WS, Verna JL, Chen R, Lunseth P, Dagenais S. Impact of a supervised worksite exercise program on back and core muscular endurance in firefighters. *American Journal of Health Promotion*. 2015;29(3):165-172.
63. Moreira RFC, Foltran FA, Albuquerque-Sendín F, Mancini MC, Coury HJCG. Comparison of randomized and non-randomized controlled trials evidence regarding the effectiveness of workplace exercise on musculoskeletal pain control. *Work*. 2012;41 Suppl 1:4782-4789.
64. Østbye T, Stroot M, Brouwer RJN, et al. The steps to health employee weight management randomized control trial: Rationale, design and baseline characteristics. *Contemp Clin Trials*. 2013;35(2):68-76.
65. Schrodt LA, Garbe KC, Shubert TE. Trained community providers conduct fall risk screenings with fidelity: An effective model for expanding reach. *Health Promotion Practice*. 2014;15(4):599-607.
66. Shimada H, Ishizaki T, Kato M, et al. How often and how far do frail elderly people need to go outdoors to maintain functional capacity? [Arch Gerontol Geriatr](#). 2010 Mar-Apr;50(2):140-6.
67. Sorensen JB, Skovgaard T, Puggaard L. Exercise on prescription in general practice: A systematic review. *Scand J Prim Health Care*. 2006;24(2):69-74.

APPENDIX C: Secondary and Tertiary Resources

1. Adamsen, L., Midtgaard, J., Rorth, M., Borregaard, N., Andersen, C., Quist, M., . . . Knutsen, L. (2003). Feasibility, physical capacity, and health benefits of a multidimensional exercise program for cancer patients undergoing chemotherapy. *Supportive Care in Cancer: Official Journal of the Multinational Association of Supportive Care in Cancer*, *11*(11), 707-716.
2. Alexander, M. J. L., Butcher, J. E., & MacDonald, P. B. (2001). Effect of a water exercise program on walking gait, flexibility, strength, self-reported disability and other psycho-social measures of older individuals with arthritis. *Physiotherapy Canada*, *53*(3), 203-211.
3. Anaby, D., Miller, W. C., Eng, J. J., Jarus, T., & Noreau, L. (2011). Participation and well-being among older adults living with chronic conditions. *Social Indicators Research*, *100*(1), 171-183.
4. Busch, A. J., Barber, K. A., Overend, T. J., Peloso, P. M. J., & Schachter, C. L. (2007). Exercise for treating fibromyalgia syndrome. *Cochrane Database of Systematic Reviews*. npag.
5. Busch, A. J., Webber, S. C., Brachaniec, M., Bidonde, J., Bello-Haas, V. D., Danyliw, A. D., . . . Schachter, C. L. (2011). Exercise therapy for fibromyalgia. *Current Pain & Headache Reports*, *15*(5), 358-367.
6. Calabrò, R. S., Reitano, S., Leo, A., De Luca, R., Melegari, C., & Bramanti, P. (2014). Can robot-assisted movement training (lokomat) improve functional recovery and psychological well-being in chronic stroke? promising findings from a case study. *Functional Neurology*, *29*(2), 139-141.
7. Carmel, E., Orbach, I., Zinger-Vaknin, T., Morad, M., & Merrick, J. (2008). Physical training and well-being in older adults with mild intellectual disability: A residential care study. *Journal of Applied Research in Intellectual Disabilities*, *21*(5), 457-465.
8. Conway, A., Schadewaldt, V., Clark, R., Ski, C., Thompson, D. R., Kynoch, K., & Doering, L. (2014). The effectiveness of non-pharmacological interventions in improving psychological outcomes for heart transplant recipients: A systematic review. *European Journal of Cardiovascular Nursing*, *13*(2), 108-115.
9. De Blecourt, A. C. E., Preuper, H. R. S., Van Der Schans, C. P., Groothoff, J. W., & Reneman, M. F. (2008). Preliminary evaluation of a multidisciplinary pain management program for children and adolescents with chronic musculoskeletal pain. *Disability & Rehabilitation*, *30*(1), 13-20.
10. Feld, R., Colantonio, A., Yoshida, K., & Odette, F. (2003). Mental health and vitality among canadian women with physical disabilities. *Psychological Reports*, *93*(1), 75-83.
11. Frost, K.L. Influence of a motivational exercise counseling intervention on rehabilitation outcomes in individuals with arthritis who received total hip replacement [thesis]. Pittsburgh: University of Pittsburgh. ; 2003.
12. Ginis, K. A. M., Latimer, A. E., McKechnie, K., Ditor, D. S., McCartney, N., Hicks, A. L., . . . Craven, B. C. (2003). Using exercise to enhance subjective well-being among people with spinal cord injury: The mediating influences of stress and pain. *Rehabilitation Psychology*, *48*(3), 157-164.
13. Hamed, R., Tariah, H. A., & Hawamdeh, Z. M. (2012). Personal factors affecting the daily functioning and well-being of patients with multiple sclerosis using the

- international classification of functioning model: A qualitative study. *International Journal of Mental Health*, 41(4), 47-61.
14. Jebakani, D. B., Sethu, G., Pahinian, A., Tipandjan, A., & Devi, R. M. (2015). Effect of therapeutic exercise on pain and psychological well-being in patients with knee osteoarthritis. *Indian Journal of Physiotherapy & Occupational Therapy*, 9(1), 147-152.
 15. Koçer, O., Wachter, M., Zellweger, M., Piazzalonga, S., & Hoffmann, A. (2011). Prevalence and predictors of depressive symptoms and wellbeing during and up to nine years after outpatient cardiac rehabilitation. *Swiss Medical Weekly*, 141.
 16. Kollén, L., Bjerlemo, B., Olsén, M. F., & Möller, C. (2008). Static and dynamic balance and well-being after acute unilateral vestibular loss. *Audiological Medicine*, 6(4), 265-270.
 17. Latimer, A. E., Ginis, K. A. M., Hicks, A. L., & McCartney, N. (2004). An examination of the mechanisms of exercise-induced change in psychological well-being among people with spinal cord injury. *Journal of Rehabilitation Research & Development*, 41(5), 643-651.
 18. Lechner, H. E., Kakebeeke, T. H., Hegemann, D., & Baumberger, M. (2007). The effect of hippotherapy on spasticity and on mental well-being of persons with spinal cord injury. *Archives of Physical Medicine and Rehabilitation*, 88(10), 1241-1248.
 19. Martyn-Nemeth, P. A., Vitale, G. A., & Cowger, D. R. (2010). A culturally focused exercise program in hispanic adults with type 2 diabetes: A pilot study. *Diabetes Educator*, 36(2), 258-267.
 20. Soderberg, E. I., Carlsson, J. Y., Stener-Victorin, E., & Dahlof, C. (2011). Subjective well-being in patients with chronic tension-type headache: Effect of acupuncture, physical training, and relaxation training. *Clinical Journal of Pain*, 27(5), 448-456.
 21. Tulloch, H., Sweet, S. N., Fortier, M., Capstick, G., Kenny, G. P., & Sigal, R. J. (2013). Exercise facilitators and barriers from adoption to maintenance in the diabetes aerobic and resistance exercise trial. *Canadian Journal of Diabetes*, 37(6), 367-374.
 22. White, C. M., Pritchard, J., & Turner-Stokes, L. (2004). Exercise for people with peripheral neuropathy. *Cochrane Database of Systematic Reviews*. n.pag.
 23. Zych, A., Yang, H., & Malkin, M. J. (2011). Perceived leisure satisfaction of participants in the arthritis foundation aquatic program. *American Journal of Recreation Therapy*, 10(2), 9-16.
 24. Bezner, J. R., & Hunter, D. L. (2001). Wellness perception in persons with traumatic brain injury and its relation to functional independence. *Archives of Physical Medicine and Rehabilitation*, 82(6), 787-792.
 25. Taylor, L. F., Kee, C. C., King, S. V., & Ford, T. A. B. L. (2004). Evaluating the effects of an educational symposium on knowledge, impact, and self-management of older african americans living with osteoarthritis. *Journal of Community Health Nursing*, 21(4), 229-238.
 26. Xenakis, N., & Goldberg, J. (2010). The young Women's program: A health and wellness model to empower adolescents with physical disabilities. *Disability and Health Journal*, 3(2), 125-129.
 27. Alnigenis, M. N. Y., Bradley, J. D., Wallick, J., & Emsley, C. L. (2001). Massage therapy in the management of fibromyalgia: A pilot study. *Journal of Musculoskeletal Pain*, 9(2), 55-67.

28. Bergström, H., Hagströmer, M., Hagberg, J., & Elinder, L. S. (2013). A multi-component universal intervention to improve diet and physical activity among adults with intellectual disabilities in community residences: A cluster randomised controlled trial. *Research in Developmental Disabilities, 34*(11), 3847-3857.
29. Born, T., & Stuiver, M. M. (2010). The effect of a therapeutic exercise program 'life in balance' on the quality of life in a patient with metastatic breast cancer: A case report. *Rehabilitation Oncology, 28*(2), 19-22.
30. del Valle, M. F., Perez, M., Santana-Sosa, E., Fiuza-Luces, C., Bustamante-Ara, N., Gallardo, C., . . . Lucia, A. (2010). Does resistance training improve the functional capacity and well being of very young anorexic patients? A randomized controlled trial. *Journal of Adolescent Health, 46*(4), 352-358.
31. Demuth, S. K., Knutson, L. M., & Fowler, E. G. (2012). The PEDALS stationary cycling intervention and health-related quality of life in children with cerebral palsy: A randomized controlled trial. *Developmental Medicine & Child Neurology, 54*(7), 654-661.
32. Desveaux, L., Beauchamp, M., Goldstein, R., & Brooks, D. (2014). Community-based exercise programs as a strategy to optimize function in chronic disease: A systematic review. *Medical Care, 52*(3), 216-226.
33. Fernández-Muñoz, J. J., Morón-Verdasco, A., Cigarán-Méndez, M., Muñoz-Hellín, E., Pérez-de-Heredia-Torres, M., & Fernández-de-las-Peñas, C. (2015). Disability, quality of life, personality, cognitive and psychological variables associated with fatigue in patients with multiple sclerosis. *Acta Neurologica Scandinavica, 132*(2), 118-124.
34. Hackney, M. E., & Earhart, G. M. (2009). Health-related quality of life and alternative forms of exercise in parkinson disease. *Parkinsonism & Related Disorders, 15*(9), 644-648.
35. Jacobsen, P. B., Phillips, K. M., Jim, H. S. L., Small, B. J., Faul, L. A., Meade, C. D., . . . Wilson, R. W. (2013). Effects of self-directed stress management training and home-based exercise on quality of life in cancer patients receiving chemotherapy: A randomized controlled trial. *Psycho-Oncology, 22*(6), 1229-1235.
36. Jaglal, S. B., Haroun, V. A., Salbach, N. M., Hawker, G., Voth, J., Lou, W., . . . Bereket, T. (2013). Increasing access to chronic disease self-management programs in rural and remote communities using telehealth. *Telemedicine and e-Health, 19*(6), 467-473.
37. Laurent, K., De Sèze, M., Delleci, C., Koleck, M., Dehail, P., Orgogozo, J., & Mazaux, J. (2011). Assessment of quality of life in stroke patients with hemiplegia. *Annals of Physical and Rehabilitation Medicine, 54*(6), 376-390.
38. Li, W., Chen, Y., Yang, R., & Tsauo, J. (2009). Effects of exercise programmes on quality of life in osteoporotic and osteopenic postmenopausal women: A systematic review and meta-analysis. *Clinical Rehabilitation, 23*(10), 888-896.
39. Mayo, N. E., Scott, S. C., Bayley, M., Cheung, A., Garland, J., Jutai, J., & Wood-Dauphinee, S. (2015). Modeling health-related quality of life in people recovering from stroke. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care & Rehabilitation, 24*(1), 41-53.
40. O'Connell, N. E., Wand, B. M., McAuley, J., Marston, L., & Moseley, G. L. (2013). Interventions for treating pain and disability in adults with complex regional pain syndrome. *Cochrane Database of Systematic Reviews, (4)*. n.pag.

41. Pacchetti, C., Mancini, F., Aglieri, R., Fundarò, C., Martignoni, E., & Nappi, G. (2000). Active music therapy in parkinson's disease: An integrative method for motor and emotional rehabilitation. *Psychosomatic Medicine*, 62(3), 386-393.
42. Zwicker, J. G., Harris, S. R., & Klassen, A. F. (2013). Quality of life domains affected in children with developmental coordination disorder: A systematic review. *Child: Care, Health and Development*, 39(4), 562-580.
43. Wassom, D. J., Lyons, K. E., Pahwa, R., & Liu, W. (2015). Qigong exercise may improve sleep quality and gait performance in Parkinson's disease: A pilot study. *International Journal of Neuroscience*, 125(8), 578-584.
44. Volpe, D., Signorini, M., Marchetto, A., Lynch, T., & Morris, M. E. (2013). A comparison of irish set dancing and exercises for people with parkinson's disease: A phase II feasibility study. *BMC Geriatrics*, 13, 54-54.
45. Tomich, G. M., Bernardino, L. S., & Ferreira, F. O. (2014). Impact of physical therapy on functional capacity and life quality of patients with chronic kidney disease. *Fisioterapia Em Movimento*, 27(4), 643-651.
46. Tsoi, W. S. E., Zhang, L. A., Wang, W. Y., Tsang, K. L., & Lo, S. K. (2012). Improving quality of life of children with cerebral palsy: A systematic review of clinical trials. *Child: Care, Health and Development*, 38(1), 21-31.
47. van Weert, E., Hoekstra-Weebers, J. E. H., Grol, B. M. F., Otter, R., Arendzen, J. H., Postema, K., & van der Schans, C. P. (2004). Physical functioning and quality of life after cancer rehabilitation. *International Journal of Rehabilitation Research*, 27(1), 27-35.
48. Tarakci, E., Yeldan, I., Huseyinsinoglu, B. E., Zenginler, Y., & Eraksoy, M. (2013). Group exercise training for balance, functional status, spasticity, fatigue and quality of life in multiple sclerosis: A randomized controlled trial. *Clinical Rehabilitation*, 27(9), 813-822.
49. Santana, M. J., S-Parrilla, J., Mirus, J., Loadman, M., Lien, D. C., & Feeny, D. (2013). An assessment of the effects of iyengar yoga practice on the health-related quality of life of patients with chronic respiratory diseases: A pilot study. *Canadian Respiratory Journal: Journal of the Canadian Thoracic Society*, 20(2), e17-e23.
50. Dittrich, S. M., Günther, V., Franz, G., Burtscher, M., Holzner, B., & Kopp, M. (2008). Aerobic exercise with relaxation: Influence on pain and psychological well-being in female migraine patients. *Clinical Journal of Sport Medicine: Official Journal of the Canadian Academy of Sport Medicine*, 18(4), 363-365.
51. Donesky-Cuenco, D., Nguyen, H. Q., Paul, S., & Carrieri-Kohlman, V. (2009). Yoga therapy decreases dyspnea-related distress and improves functional performance in people with chronic obstructive pulmonary disease: A pilot study. *Journal of Alternative & Complementary Medicine*, 15(3), 225-234.
52. Tse, M. M. Y., Vong, S. K. S., & Tang, S. K. (2013). Motivational interviewing and exercise programme for community-dwelling older persons with chronic pain: A randomised controlled study. *Journal of Clinical Nursing*, 22(13), 1843-1856.
53. Solà, I., Thompson, E., Subirana, M., López, C., & Pascual, A. (2004). Non-invasive interventions for improving well-being and quality of life in patients with lung cancer. *The Cochrane Database of Systematic Reviews*, (4), CD004282.
54. Taylor-Piliae, R. E. (2003). Tai chi as an adjunct to cardiac rehabilitation exercise training. *Journal of Cardiopulmonary Rehabilitation*, 23(2), 90-96. Boudreau, F., Godin,

- G., & Poirier, P. (2011). Effectiveness of a computer-tailored print-based physical activity intervention among french canadians with type 2 diabetes in a real-life setting. *Health Education Research*, 26(4), 573-585.
55. Boudreau, F., Godin, G., & Poirier, P. (2011). Effectiveness of a computer-tailored print-based physical activity intervention among french canadians with type 2 diabetes in a real-life setting. *Health Education Research*, 26(4), 573-585.
56. O'Brien, K., Tynan, A., Nixon, S., & Glazier, R. H. (2008). Effects of progressive resistive exercise in adults living with HIV/AIDS: Systematic review and meta-analysis of randomized trials. *AIDS Care*, 20(6), 631-653.
57. Perceived barriers, facilitators and benefits for regular physical activity and exercise in patients with rheumatoid arthritis: A review of the literature. (2015). *Sports Medicine*, 45(10), 1401-1412.
58. Lan, C., Chen, S., Wong, M., & Lai, J. (2008). Tai chi training for patients with coronary heart disease. *Medicine and Sport Science*, 52, 182-194.
59. Demark-Wahnefried, W., Clipp, E. C., Lipkus, I. M., Lobach, D., Snyder, D. C., Sloane, R., . . . Kraus, W. E. (2007). Main outcomes of the FRESH START trial: A sequentially tailored, diet and exercise mailed print intervention among breast and prostate cancer survivors. *Journal of Clinical Oncology*, 25(19), 2709-2718.
60. Willén, C., Sunnerhagen, K. S., & Grimby, G. (2001). Dynamic water exercise in individuals with late poliomyelitis. *Archives of Physical Medicine and Rehabilitation*, 82(1), 66-72.
61. Shikako-Thomas, K., Majnemer, A., Law, M., & Lach, L. (2008). Determinants of participation in leisure activities in children and youth with cerebral palsy: Systematic review. *Physical & Occupational Therapy in Pediatrics*, 28(2), 155-169.
62. Soukup, M. G., Lonn, J., Glomsrod, B., Bo, K., & Larsen, S. (2001). Exercises and education as secondary prevention for recurrent low back pain. *Physiotherapy Research International*, 6(1), 27-39.
63. Mendelson, A. D., McCullough, C., & Chan, A. (2011). Integrating self-management and exercise for people living with arthritis. *Health Education Research*, 26(1), 167-177.
64. Tetlie, T., Eik-Nes, N., Palmstierna, T., Callaghan, P., & Nøttestad, J.,A. (2008). The effect of exercise on psychological & physical health outcomes: Preliminary results from a Norwegian forensic hospital. *Journal of Psychosocial Nursing and Mental Health Services*, 46(7), 38-43.