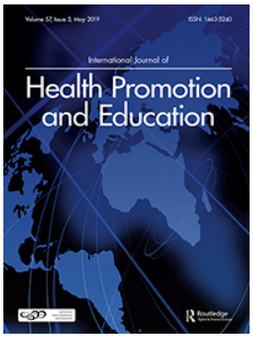

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Multidimensional wellness promotion in the health and fitness industry

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ABSTRACT

Current trends in the United States indicate an increase in sedentary behaviors, obesity, stress and poor diet, contributing to heightened rates of chronic illness and mortality. These trends illustrate a need for prioritizing prevention and wellness promotion, and conceptualizing health as a multidimensional construct. The exercise and fitness industry is uniquely positioned to support individuals in establishing healthy lifestyle trends that address multiple domains of wellness. This research study utilized health and fitness professional survey data to assess relationships between the frequency of addressing each of the five primary domains of wellness (physical, social, emotional, intellectual and spiritual), and a number of demographic variables. Relationships between the frequency of addressing domains of wellness and all demographic variables (e.g. physical wellness by industry role) were examined using Pearson Chi Square Tests of Independence. Results indicate differences in the frequency that unique dimensions of wellness were addressed with clients, as well as differences based on industry role and gender. Implications are discussed, including challenges associated with a consensus organizational definition of wellness, and variability in training and education requirements of fitness professionals, that may impact the promotion of wellness domains beyond the traditional physical focus.

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KEYWORDS
Wellness; multidimensional; fitness; lifestyle

Introduction

Background

Chronic diseases are the main causes of poor health, disability and death. Chronic illness is largely driven by lifestyle behaviors, linking factors such as inactivity, diet, smoking and sustained stress with an increased risk for major illness and death (Smith et al. 2013). Many adults spend 70% or more of their waking hours sitting (Dietz et al. 2015), which has been associated with negative health outcomes (Biswas et al. 2015). Conversely, replacing as little as 30 min of sedentary time with light activity has been found to reduce risk of mortality by as much as 14% (Schmid et al. 2016). The increasing prevalence of poor diet and unhealthy lifestyle indicates that more than

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one in three adults, and one in six children are considered to have obesity (U.S. Department of Health and Human Services 2014), while dietary factors represent a significant proportion of deaths from heart disease, stroke and Type 2 diabetes (Micha et al. 2017). In addition, life stress is strongly associated with poor mental and physical health (Slavich et al. 2010), and accounts for substantial mortality (Pedersen, Bovbjerg, and Zachariae 2011).

Wellness

Understanding the impact of various lifestyle behaviors on health outcomes is essential in shaping how chronic illness is addressed. Acceptance of a multidimensional conceptualization of health and wellness has been gradual within the traditional Western medical model. Historically, the biomedical model of illness has focused exclusively on biology while ignoring psychological, social and environmental influences on health and well-being. A change toward a comprehensive understanding of health is supported by the World Health Organization (WHO), which defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO 1992). Building on this understanding, focus should be shifted toward establishing healthy lifestyle trends to improve multiple domains of wellness that result in wellness promotion, and ultimately decreased chronic illness and death.

Health and fitness industry stakeholders have historically been promoters, innovators and leaders in assisting individuals in making lifestyle changes leading to improved health outcomes. The changing paradigm in health and wellness toward inclusion of domains beyond the traditional physical fitness focus requires a new approach to wellness promotion among industry leaders to best meet the changing needs of clientele. The research supporting that domains of wellness such as social, spiritual and emotional can have a profound impact on one's wellness (e.g. Fry 2000; Raza et al. 2011) necessitates alternative approaches, education, training and promotional efforts within the industry. For example, spiritual well-being is gaining increased attention in the health and rehabilitation literature, as researchers have found that spiritual beliefs can significantly impact quality of life, mental health and physical health, such as injury rehabilitation and coping with chronic illness (Wilson et al. 2017).

The subjective nature of terminology such as fitness, health and wellness creates challenges in developing consensus definitions, and consequently, approaches and interventions that are applicable across models. Within the industry, fitness is generally accepted as the ability to function well in daily activities without injury, enjoy leisure time, be healthy, and includes: cardiorespiratory, flexibility, body composition, muscular strength and endurance components (Mantell 2013). However, the emergence of the wellness paradigm, generally conceptualized as a multidimensional construct, has resulted in many different wellness definitions and models. Among the evidence-based models of wellness are Dunn's High Level Wellness (Dunn 1977), which integrates body, mind and spirit; Ardell's Components of Wellness model (1977), which incorporates three parallel domains that include physical, mental and meaning and purpose; and Hettler's Hexagonal Model of Wellness (1980), incorporating social, spiritual, physical, emotional, occupational and intellectual domains of wellness. Additionally, the Wheel of Wellness (Witmer and Sweeney 1991), which evolved into

the Indivisible Self Wellness Model (Myers and Sweeney 2004), has a substantial research base and is measured using the Five Factor Wellness Evaluation of Lifestyle (5F-WEL). Although there are numerous conceptualizations of wellness evident in the literature, consistent among them is a multidimensional understanding of the construct. The most commonly included components of wellness are physical, social, emotional, intellectual and spiritual (Roscoe 2009), although domain titles may vary depending upon the model.

Education and training

In order to support individuals in improving multidimensional wellness, counseling and lifestyle change techniques are needed to inform, engage and empower clients so they can effectively communicate their needs, and ensure that they are active in change-related decision-making (Caldwell, Gray, and Wolever 2013). Thus, the integration of behavior change theory into education and training of health professionals is critical to the synthesis of physical health with other domains of wellness. There are numerous models related to lifestyle behavior change including the Theory of Planned Behavior (Ajzen 1991), Health Belief Model (Rosenstock 1974) and the Transtheoretical Model of Change (Prochaska and Velicer 1997), which may be beneficial as foundational theories upon which to base lifestyle change interventions and approaches. In addition to knowledge related to theoretical underpinnings, advanced understanding of specific evidence-based strategies to support individuals in moving toward healthy lifestyle change are essential to adopting a comprehensive approach to wellness within the industry.

There is evidence that the health and fitness industry is making progress in re-conceptualizing health and wellness, and developing strategies to facilitate lasting wellness-focused lifestyle change. For example, the growing prevalence of health 'coaching' models is indicative of efforts to develop brief approaches that focus on lifestyle change. Coaching can be defined as a means of helping others attain a desired goal (O' Connell, Palmer, and Williams 2013), and can include models such as Life Coaching, Wellness Coaching and Executive Coaching, depending on client needs. There are numerous programs and certifications that focus on health and/or wellness coaching including the National Society of Health Coaches, Wellcoaches, American Council on Exercise and the Duke Integrative Health Coach Program. Despite the diversity among the numerous models, training requirements and definitions of wellness (Smith et al. 2013), approaches prove consistent in the understanding that wellness is not a unidimensional construct, and that lifestyle change is a critical factor in attaining multidimensional health and wellness.

Given the evidence supporting wellness as a multidimensional construct, and the understanding that domains may have complex, reciprocal relationships with one another (e.g. poor psychological wellness may impact physical wellness), it is essential that health and fitness professionals develop expertise in the ways that varied components (e.g. emotional wellness) may affect clients' health goals and outcomes, as well as training in behavior change theory and intervention. To truly support clients in pursuit of wellness, it should be addressed at both general and domain-specific levels using behavior-based theory and coaching techniques.

Purpose

The purpose of this study was to examine the frequency of promotion of lifestyle change via various domains of wellness among health and fitness professionals. Additionally, based on a multidimensional model of wellness, the study aimed to examine relationships between the frequency of addressing each of the five primary domains of wellness (physical, social, emotional, intellectual and spiritual) and a number of demographic variables. A survey was utilized to answer the primary research questions:

Which domains of wellness do health and fitness professionals most often address with clients?

Is there a relationship between multidimensional wellness promotion and specific demographic variables (e.g. education, age, industry role, gender, certification type)?

Materials and methods

Procedure

This cross-sectional exploratory study utilized survey data to assess frequency of promoting multidimensional wellness among health and fitness professionals. Surveys were administered to voluntary participants at several national health and fitness conferences between 2015 and 2017. Since anonymous data were gathered for programming and training rather than research purposes, the secondary analysis was deemed exempt by the affiliated Institutional Review Board (IRB). The survey was developed and administered by representatives from an industry stakeholder to inform needs related to future training, education and marketing. The representatives provided permission for analysis for research purposes.

The study sample consisted of 185 individuals who identified as health and fitness professionals. A convenience sampling approach was utilized, as all participants were attendees at national conferences focused on health and fitness. Surveys were administered at the beginning of a number of 'break-out sessions' of varied content throughout the conferences. An explanation of the survey and purpose was provided by the stakeholder representative, who emphasized the voluntary and anonymous nature of the surveys.

Surveys were created to gather sample demographic information, as well as information related to the frequency of discussing domains of wellness with clients (Appendix). Among the demographic variables assessed were: age, education, certifying organization, gender and industry role. Although there are numerous models of wellness, this survey utilized a common factors approach (Roscoe 2009) which includes emotional, intellectual, physical, spiritual and social wellness domains. Questions about each of the above-mentioned domains of wellness (e.g. 'How frequently do you discuss social wellness with clients?') were posed using a 5-point Likert scale format (1 = Never; 5 = Very often). An additional item inquired about the frequency of discussing lifestyle change with clients. Frequencies were calculated for all demographic variables,

providing descriptive statistics for the study sample (Table 1). Response frequencies based on wellness domains were also calculated to provide insight into fitness professionals' priorities (Table 2). Finally, to identify relationships between groups based on category (e.g. physical wellness by industry role), a Pearson Chi Square Test of Independence was performed (See Tables 3 and 4 for Chi Square results). All statistical analyses were conducted using SPSS 23 software (IBM).

Table 1. *Sample characteristics* (N = 185).

	Frequency (Percent)
Gender	
Male	48 (25.9)
Female	136 (73.5)
Other	1 (.5)
Age	
20–29	46 (24.9)
30–39	44 (23.8)
40–49	49 (26.5)
50–59	38 (20.5)
60+	8 (4.3)
Education	
High School Diploma	39 (21.1)
Associate's Degree	3 (1.6)
Bachelor's Degree	103 (55.7)
Master's Degree	35 (18.9)
Doctoral Degree	5 (2.7)
Certification	
ACE[a]	45 (24.3)
ACSM[b]	21 (11.4)
NASM[c]	46 (24.9)
NSCA[d]	5 (2.7)
ISSA[e]	6 (3.2)
Other	23 (12.4)
Multiple	39 (21.1)
Role	
Personal Trainer	43 (23.2)
Group Instructor	5 (2.7)
Strength Conditioning Coach	1 (.5)
Educator	2 (1.1)
Club owner/manager	2 (1.1)
Researcher	1 (.5)
Two roles	46 (24.9)
Three roles	50 (27.0)
More than Three roles	35 (18.9)

[a]American Council on Exercise. [b]American College of Sports Medicine. [c]National Academy of Sports Medicine. [d]National Strength and Conditioning Association. [e]International Sports Sciences Association

Table 2. Wellness domains response frequency (%).

	Never	Almost never	Sometimes	Often	Very often
Physical			6.5	33.5	60.0
Social	2.2	16.8	38.9	26.5	15.7
Spiritual	10.3	27.6	34.1	14.6	13.5
Emotional	1.1	10.3	28.1	34.1	26.5
Intellectual	6.5	21.6	40.0	20.0	11.9
Lifestyle change			11.4	30.3	58.4

Table 3. Wellness domains by industry role.

	df	Chi Sq	p	ES (d)
Social	16	20.53	.197	
Physical	8	23.34	.002	.27
Emotional	16	30.19	.017	.26
Intellectual	16	25.76	.057	
Spiritual	16	22.43	.130	
Lifestyle change	8	23.07	.003	.25

Table 4. Wellness domains by gender.

	df	Chi Sq	p	ES (d)
Social	4	3.86	.425	
Physical	2	4.01	.135	
Emotional	4	12.10	.017	.179
Intellectual	4	2.41	.661	
Spiritual	4	3.43	.489	
Lifestyle change	2	5.75	.056	

Results

Descriptive statistics were calculated for all study participants (N = 185). Results illustrated that nearly three times as many participants were female (n = 136) than male (n = 48). Ages of participants were widely dispersed, with each age range (e.g. 30–39) representing more than 20% of the total sample. The majority of participants had achieved a bachelor's degree (n = 103), followed by high school diploma (n = 39) and master's degree (n = 35). American Council on Exercise (ACE; n = 45) and National Academy of Sports Medicine (NASM; n = 46) were the most common certifications reported by fitness professionals, followed by American College of Sports Medicine (ACSM; n = 21). Twenty-three participants reported 'other' as certification, while a significant percentage reported having 'multiple' certifications (n = 39). Of the specific roles identified by participants, personal trainer was most common (n = 43); however, the majority of fitness professionals indicated that they assumed two roles (n = 46), three roles (n = 50) or more than three roles (n = 35). Complete descriptive statistics are provided in Table 1.

In order to examine potential relationships between the categorical variables, Pearson Chi Square Tests of Independence were conducted using $\alpha = .05$ for significance. Results indicated a number of significant associations between industry role and the frequency of promoting various domains of wellness. For example, the relationship between industry role and physical wellness promotion was significant, X^2 (8, N = 185) = 24.34, $p < .01$, with a small to medium effect size (d = .27). Of the participants who identified as personal trainers, 84% indicated 'often' or 'very often' in response to frequency of discussion of physical wellness with clients. Similarly, among those who identified as having multiple industry roles (three or more), 98% responded 'often' or 'very often'.

Chi Square tests also revealed significant relationships between industry role and the frequency of discussing both emotional wellness, X^2 (16, N = 185) = 30.19, $p < .05$, d = .26, and lifestyle change, X^2 (8, 185) = 23.07, $p < .01$, d = .25). Results indicated that 40% participants who identified as having one industry role reported that they discussed emotional wellness 'often' or 'very often', in contrast to 72% of those who had multiple roles. Following a similar trend to the previously discussed domains of

wellness, those who identified as having multiple industry roles reported a high frequency of addressing lifestyle change with clients 'often' or 'very often' (98%).

In addition, a Chi Square analysis of the frequency of addressing wellness domains based on gender was conducted. Although no significant results were found for physical, intellectual, spiritual or social wellness based on gender, a significant relationship was found for gender and emotional wellness, X^2 (4, N = 185) = 12.01, $p < .05$, $d = .18$. Results indicate that female fitness professionals were significantly more likely to address emotional wellness ('often' or 'very often' = 67%) than male fitness professionals (42%). No significant differences were found for any of the wellness domains based on type of certification, age or education level.

Discussion

Given the shifting paradigm toward a more comprehensive conceptualization of health and wellness, there is a clear need for fitness industry professionals to promote health and lifestyle change from a multidimensional perspective. Findings from the current study demonstrated differences in addressing wellness concepts with clients across all health and fitness professionals surveyed. Differences in the frequency of addressing multiple domains of wellness when working with clients illustrate the current paradigm focused primarily on physical health, and represent a need for re-conceptualizing health and wellness as multidimensional constructs within this industry. Although the exercise science industry has traditionally focused exclusively on physical health, the existing literature illustrating connections between domains of wellness and the influence on one's physical state highlights the importance of using a multidimensional approach to health and wellness. This study provides evidence that despite the acceptance of a multidimensional view of wellness, industry professionals continue to promote a narrow conceptualization of health with their clientele.

Several potential barriers may be impacting multidimensional wellness promotion in the health and fitness industry. Although multidimensional wellness is emerging as a paradigm, the traditional western medical model continues to be the dominant approach to treating illness, and by extension, addressing fitness concerns and challenges. Thus, conceptualizing health and wellness as a combination of interrelated domains as opposed to exclusively physically focused has been slow. As a result, training and education opportunities related to multidimensional wellness promotion may be limited for health professionals. Training issues are compounded by the number of certifying organizations, which, while perhaps consistent in their intention to provide training and credentialing for industry professionals, may have vastly different priorities and utilize differing models of wellness. The lack of consensus definition of wellness and relevant promotion strategies, compounded by potential differences in philosophies and training among certifying organizations, point to barriers to promoting wellness in consistent and inclusive ways.

Industry roles

Wellness promotion within the industry is further compounded by the variability in fitness professional roles and associated education and training, as evidenced by the significant differences between roles for wellness domains within this study sample.

Those with multiple roles (n = 85) consistently scored higher across all domains of wellness, as opposed to those who reported a single industry role (e.g. personal trainer or group instructor). It is possible that those with multiple roles had been afforded opportunities for advanced training, increasing the likelihood of specialized certifications (e.g. health coach) that integrate more holistic approaches. Single certifications may not provide a comprehensive foundation of wellness and lifestyle change, whereas fitness professionals who have multiple roles may gather more integrative training through multiple outlets.

Results also highlight potential differences between academic education and industry-specific training. Based on the current sample, the hypothesis that advanced education results in a more integrated approach to wellness promotion was not supported, as no significant relationships were found across wellness domains based on education level. Thus, certification-specific training in integrative approaches may be more influential than formal academic study. Since there is no minimum formal education expectation for the majority of fitness professional roles, the responsibility for preparation in wellness promotion among professionals falls on certifying organizations and industry leaders.

It is clear from the results related to promoting domains of wellness beyond the physical, that the training related to multidimensional wellness is inadequate, particularly among individual certification holders. Re-conceptualizing health as a construct that promotes understanding of the integrated relationships between wellness domains, as well as the influence of social, spiritual, intellectual and emotional well-being on physical health, may lead to improved training opportunities for industry professionals. Thus, more wellness-focused training should be integrated across certifications to increase accessibility and consistency. For example, those pursuing a personal trainer certification should have access to information and training on multidimensional wellness promotion without having to assume multiple roles and/or certifications. Additionally, increased continuing education courses and workshops focused on multidimensional wellness promotion, as well as 'specialization' certificates, could provide opportunities for professional growth in this area.

Gender

Additional inquiry should be directed toward gender differences in conceptualizations and promotion of wellness. Although no significant differences were found in education or role based on gender in this sample, results indicate that female health and fitness professionals tend to address wellness across domains (beyond physical) more frequently than male professionals. In particular, female professionals were likely to address emotional wellness significantly more than their male counterparts. This is consistent with previous research which has found that 'emotion work', which involves promoting the emotional well-being of others, is typically exhibited more often by women than men (Eichler and Albanese 2007). Furthermore, there seems to be a social understanding that women are more innately skilled at perceiving and attending to emotions compared to men (Thomeer, Umberson, and Pudrovska 2013). Notably, Thomeer, Reczek, and Umberson (2015) recently emphasized the importance of studying gender differences regarding emotion work, especially in relation to physical health.

Future research may examine potential differences in training across gender, as well as role and approach to working with clients. For example, it is possible that female health professionals take a more holistic approach, incorporate more emotion work into their practice or have a higher prevalence of roles that currently incorporate emotional and lifestyle change wellness concepts (e.g. health coach, yoga instructor). Additional information regarding training and approach related to multidimensional wellness among female fitness professionals may inform existing discrepancies and future training that ensures inclusivity and competency across gender.

Limitations

Several study limitations should be addressed. As this study utilized secondary data from a sample of health and fitness professionals in attendance at conferences specific to this industry, there is the possibility that results cannot be generalized beyond participants. Conference attendance may be representative of increased investment and training, and may not be representative of fitness professionals who do not seek professional development opportunities. The study was also limited by the cross-sectional design and convenience sample, since wellness-related constructs were assessed at one point in time with a population of volunteer participants. Additionally, although it is possible to operationalize training, knowledge and application by industry role and certifying organization, the quality and extent of training related to multidimensional wellness was not assessed. Thus, a causal relationship between training and wellness promotion cannot be definitively assumed. Finally, although findings indicated that industry professionals who identified as having multiple roles were addressing multiple domains of wellness with more frequency than those with one role, the inability to discern which roles they employ most frequently is a major limitation. Future study should include modified data collection methods to facilitate an analysis of primary industry roles.

Conclusion

Fitness professionals are in a unique position to support clients in not only improving their physical health, but in developing strategies to improve multiple facets of their lives. This study demonstrates a continued emphasis on physical wellness among fitness professionals, and the lack of attention given to other wellness domains within the health and fitness industry such as spiritual and intellectual wellness. Furthermore, the results of the current study highlight discrepancies in wellness promotion based on gender and industry role. The finding that professionals with multiple industry roles address multidimensional wellness domains with greater frequency than those with a single role may indicate that with increased roles or certifications, comes more wellness-related training opportunities. In addition, the lack of relationship between education level and wellness promotion seems to indicate that training and experience based on multiple industry roles is more impactful than formal education (i.e. degree level) in promoting domains of wellness. Training opportunities that emphasize wellness promotion for health and fitness professionals regardless of industry role are

essential to supporting the shifting paradigm, and ultimately supporting clients in moving toward optimal wellness across multiple interrelated domains.

The other finding of interest, that women were more likely to address emotional wellness than men, indicates a need for examining the training experiences in this arena with consideration of gender-related factors. Given the impact emotional states can have on physical well-being, this gender discrepancy may require intentional efforts to ensure inclusivity and address competency issues across training opportunities. Ultimately, this study provides evidence of a continued lack of emphasis on the multidimensional nature of wellness by industry professionals across roles, education, gender, certification type and age. Despite the increased understanding and acceptance of the multidimensional wellness model and the potential impact of wellness domains such as emotional and spiritual on physical health, there appears to be a need for increased training specific to these domains within the health and fitness industry. In order to truly promote wellness as a multidimensional construct and foster healthy lifestyle trends, more empirical and practical attention is needed in this regard.

Disclosure statement

No potential conflict of interest was reported by the authors.

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Appendix

(1) **Demographic information**:

Gender	Age	Education
☐ M	☐ 20–29	☐ H.S.
☐ F	☐ 30–39	☐ Bachelor Degree
	☐ 40–49	☐ Master Degree
	☐ 50–59	☐ Doctoral Degree
	☐ 60+	

(2) **How would you describe your role in the health and fitness industry? (may check more than one)**

- ☐ Personal Trainer
- ☐ Group Instructor
- ☐ Health Coach
- ☐ Strength & Conditioning Coach
- ☐ Educator
- ☐ Club Manager / Owner
- ☐ Sports Coach
- ☐ Researcher
- ☐ Other

(3) **What is your current certification(s) affiliation?**

- ☐ American Council on Exercise (ACE)
- ☐ American College of Sports Medicine (ACSM)
- ☐ National Academy of Sports Medicine (NASM)
- ☐ National Strength and Conditioning Association (NSCA)
- ☐ International Sports Sciences Association (ISSA)
- ☐ International Health, Racquet & Sportsclub Association (IHRSA)
- ☐ Other

(4) **How frequently do you discuss physical wellness with clients?**

1	2	3	4	5
Never	Almost Never	Sometimes	Often	Very Often

(5) **How frequently do you discuss social wellness with clients?**

1	2	3	4	5
Never	Almost Never	Sometimes	Often	Very Often

(6) **How frequently do you discuss spiritual wellness with clients?**

1	2	3	4	5
Never	Almost Never	Sometimes	Often	Very Often

(7) **How frequently do you discuss emotional wellness with clients?**

1	2	3	4	5
Never	Almost Never	Sometimes	Often	Very Often

(8) **How frequently do you discuss intellectual wellness with clients?**

1	2	3	4	5
Never	Almost Never	Sometimes	Often	Very Often

(9) **How frequently do you discuss lifestyle change with clients?**

1	2	3	4	5
Never	Almost Never	Sometimes	Often	Very Often