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# A Framework for Exploring Adolescent Wellness

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Over the years, there have been significant changes in the conceptualization of adolescent health and wellness. Previously, concentration on the medical model provided a prescriptive definition of health that highlighted treatment of symptoms, illness, and chronic disease. Today, the notion of health has been extended to include a focus on wellness promotion. The concept of wellness was originally examined by Dunn (1977), who defined it as “an integrated method of functioning which is oriented toward maximizing the potential of which the individual is capable. It requires that the individual maintain a continuum of balance and purposeful direction within the environment in which he is functioning” (p. 5). Dunn (1977) conceptualized the movement toward holistic wellness, and since then, clinicians and researchers have contributed a great deal to the clarification and development of this important aspect of health.

Research into adolescent wellness has increased over the last decade (Katja, Paivi, Marja-Terttu, & Pekka, 2002; Makinson & Myers, 2003; Myers, Sweeney, & Witmer, 2000;

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This article presents and explains a “Framework for Exploring Adolescent Wellness” and outlines a research approach used to explore adolescent wellness specific to the discipline of nursing. The “Framework for Exploring Adolescent Wellness” assessed the concept of wellness through the perceptions of youth and sought to explain the relationship between adolescent well-being and development. A wellness survey was used to collect data from 280 youth, 16 to 20 years old, in two Western Canadian high schools. Their perceptions of wellness meant more to them than regular physical activity and healthy eating. The majority of youth suggested that psychological (89%), social (85%), and physical (80%) development made the most significant contribution to adolescent wellness. Slightly more than half the youth felt that spirituality (53%) contributed to their sense of wellness. These research findings indicate the need for an approach to adolescent nursing care that includes a high priority and greater visibility to the practice and philosophy of wellness.

Sharkey, 1999; Steiner, Pavelski, Pitts, & Mcquivey, 1998), and it is clear that the concept of adolescent wellness is beginning to emerge as a priority among health experts. However, studies conducted with a mid- to older-adolescent population tend to be non-holistic in the approaches taken, not applicable to nursing, and generally, focused on fixing the health problems associated with adolescence. Current challenges persist in efforts to define the concept of adolescent wellness and to determine the factors responsible for promoting adolescent well-being. More in-depth, nursing research that includes youth samples is needed to examine all the developmental dimensions of adolescent wellness to develop an understanding of its complexities and to attend to the holistic health care needs of today's adolescents.

The purpose of the study was to present and explain a *Framework for Exploring Adolescent Wellness* and to outline a research approach for exploring adolescent wellness specific to the discipline of nursing. This research attends to the physical, spiritual, and social developmental dimensions of adolescent lives. The *Framework for Exploring Adolescent Wellness* was used to assess the concept of wellness through the perceptions of youth, and to explain the

relationship between adolescent well-being and development. This knowledge related to the construct of adolescent wellness is relatively new in its contribution to nursing research.

## Background

A review of the research literature specifically related to adolescent wellness in the high school setting revealed that an abundance of articles have been published over the last 20 years. However, only a small number of these articles refer to adolescent wellness from a holistic nursing perspective. The literature reviewed was delimited to preconceived categories of wellness and to studies that focused on adolescent wellness from a holistic perspective.

The growing interest in an approach that would address adolescent wellness in a holistic fashion led to the development of several models that sought to promote adolescent wellness. In these models, a common theme suggested that wellness is a complex state of balance between certain interconnected dimensions, including but not limited to physical, psychological, socio-cultural, social, friendship, work, love, and spirituality (Chandler, Holden, & Kolander, 1992; Hettler, 1980; Neuman & Fawcett, 2002; Sweeney & Witmer, 1991).

Other studies also addressed adolescent wellness. For example, Dixon Rayle (2005); Hattie, Myers, and Sweeney (2004); and Makinson and Myers (2003) used a model called the wheel of wellness that included five related life tasks (spiritual, self-direction, love, friendship, and work/leisure) that have been applied to youth. Sharkey (1999) suggested a relationship between the factors related to wellness and risk-taking behaviors in adolescents. Other studies included a profile of health problems that exist among youth today (Hayward & Sanborn, 2002; Steiner et al., 1998), as well as explorations of the subjective well-being and levels of adolescent life satisfaction (Ben-Zur, 2003; Gilman & Huebner, 2006; Katja et al., 2002). The common dimensions of adolescent wellness presented by most of its proponents included physical, psychological, socio-cultural, developmental, and spiritual. These dimensions were seen to interact with one another in both positive and negative ways. Although the existing literature has contributed to understanding wellness, the typical intended use of the models was to improve the practice of counseling or to facilitate interventions with adolescents.

The Neuman Systems Model presented a comprehensive holistic approach that has been used extensively in nursing practice (Neuman & Fawcett, 2002). The model includes five variables (physical, psychological, sociocultural, spiritual, and developmental), considered simultaneously. Neuman's model contributes to an understanding of the relationship between wellness and the multidimensions of adolescents' lives. However, similar to the wheel of wellness, the model is extremely complex, and its application to the pediatric population has proven to be challenging. Currently, there is no satisfactory, comprehensive, or practical model designed specifically for pediatric nurses to assess adolescent wellness.

### A Framework for Exploring Adolescent Wellness

To create a wellness construct, Neuman's Systems Model (Neuman & Fawcett, 2002) was adapted to provide a basis for this study because it presents a broad, comprehensive, holistic perspective, suitable for multidisciplinary settings. Spurr (2009) used Neuman's model to think about the relationship between wellness and the developmental dimensions of adolescents' lives, to understand the

**Figure 1.**  
**The Framework for Exploring Adolescent Wellness was used as a practical guide for pediatric nurses to assess wellness, to understand, and to describe the relationship between wellness and the developmental dimensions of adolescent lives.**



complexities of this phenomenon, and to clearly articulate the conceptualization of adolescent wellness. The *Framework for Exploring Adolescent Wellness*, illustrated in Figure 1, was developed as a user-friendly approach for pediatric nurses to investigate wellness in the physical, psychological, social, and spiritual dimensions of adolescents' lives (Spurr, 2009). This model is novel because it views adolescents from a positive lens and gives attention to the details of a holistic approach. This framework provides pediatric nurses with practical strategies to assess all characteristics and strengths of this population.

Similar to Neuman and Fawcett (2002), in this study, wellness is described as a system that is in a constant state of balance between the physical, spiritual, social, and psychological developmental dimensions (Spurr, 2009). Wellness is understood to encompass the aggregate of the developmental dimensions of life. These dimensions are active, constantly changing, and interrelated. Further, the dimensions assist adolescents to cope more effectively with imposing stressors from the external environment. The dimensions are not

to be considered in isolation, but rather, should be seen as part of the whole state of wellness (Neuman & Fawcett, 2002).

Within each of the four main dimensions, there are several important factors to assess when evaluating adolescent wellness. For example, the components of the physical development dimension include regular physical activity, healthy eating, body weight, and health habits, such as smoking, alcohol, or drug use. Within the spirituality dimension, it is essential to assess adolescents' views of right and wrong together with their personal values and beliefs. The psychological development dimension includes a thorough investigation of self-esteem and self-concept. Lastly, an assessment of the social support dimension of wellness includes consideration of the adolescents' relationships with their families, school communities, and peers (Spurr, 2009).

The *Framework for Exploring Adolescent Wellness* was used to illustrate the researchers' stipulation that adolescents need to develop in all four developmental dimensions to achieve holistic wellness. In other words, the absence of growth in one

**Table 1.**  
**Collective Demographic Information**

Variable	N (Total = 280)	Percentage
Site One	152	54.0%
Site Two	128	46.0%
<b>Gender</b>		
Male	150	54.0%
Female	130	46.0%
<b>Age</b>		
16 years old	160	57.0%
17 years old	101	36.0%
18 years old	16	06.0%
19 years old	2	00.7%
20 years old	1	00.3%

or more dimensions is predicted to lead to a lower sense of wellness. The conceptualization was considered to represent the ideal state of wellness and was used as a guide to compare the participant responses or their perceived states of wellness.

## Methods

### Study Design

An exploratory quantitative study was used to investigate adolescent wellness and to describe the relationship between wellness and the developmental dimensions of adolescent lives.

### Sample

A purposeful sample of 16- to 20-year-old youth participants ( $n = 280$ ) was recruited from two Western Canadian high schools. The qualifying criteria for participation in the study provided for a purposeful sample of middle-aged adolescents who were 16 years of age or older, who were enrolled in at least one grade 11 class, who were present on the day of data collection, and who were willing to volunteer to participate in the research. Mason (2002) described purposive sampling techniques as allowing for a sample that is meaningful and that permits the researcher to test a theory or argument or build knowledge for further research. It is well known that such techniques intentionally include people of specific interest and exclude others. McMillan and Schumacher (2001) recommend

a minimum of 30 participants for correlational analysis designed to explore significant relationships between factors; therefore, the sample size of 280 was considered more than sufficient. The demographic information provided by the participants in both sites is provided in Table 1.

The sample was composed of more males than females, and respondents were predominantly 16 and 17 years old. Additionally, the schools were similar in terms of total number of attending grade 11 students (225 and 234) and total enrolment in each of the schools (972 and 675). This information has been provided for the sole purpose of presenting contextual demographic data. No further use was made of gender, age, or site variables for this study. Demographic data, such as race and socioeconomic status, were not obtained to maintain confidentiality of the two participating schools in the small mid-western Canadian city.

### Survey Design, Validity, and Reliability

Sharkey (1999) created and validated an Adolescent Wellness Survey (AWS) that has been administered to high school students in the United States. The AWS showed evidence of internal consistency, with all subscales having an alpha coefficient of 0.72 or higher (Sharkey, 1999). Thus, some items presented in the AWS (10 in total) were selected and adapted to build an original survey to explore adolescent wellness. The survey in this study was logically sequenced

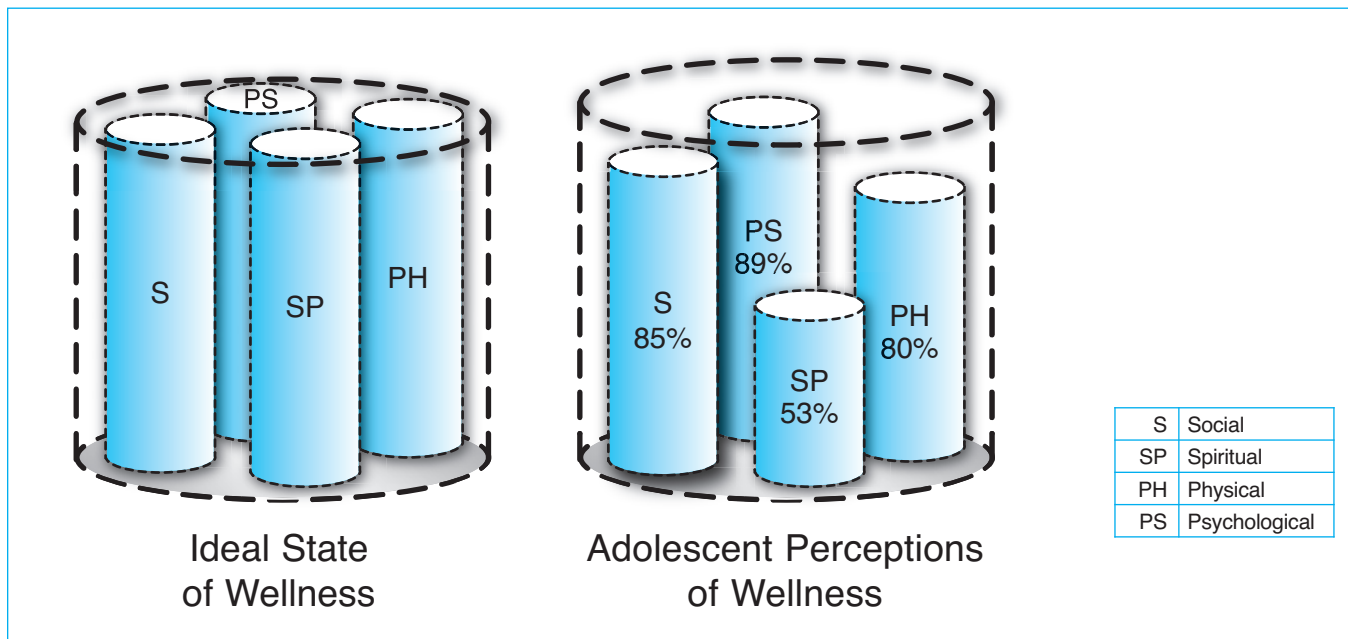
into four developmental dimensions (physical, psychological, spiritual, and social) and included a total of 63 questions.

The items in each developmental dimension were combined to form a scale to measure each developmental area, and these scales were then correlated with the wellness composite variable. There were two items measuring wellness ("I am well" and "My level of wellness"). These items were combined to form a wellness composite variable. The two items have different response scales, and therefore, each subject's score on each variable was first converted to a standard z-score and then added to form a composite score. As recommended in the article by Cresswell (2002), each item was transformed to a standard z-score to ensure that both items had an  $M = 0$  and an  $SD = 1$ ; they were then added to form a composite wellness measure, with  $M = 0$  and  $SD = 2$ , as a standard procedure for creating a variable composed of items with different response scales.

To establish content validity, feedback was requested by health and education experts on the items of the survey. The survey and scales were refined, and the language was clarified based on the experts' suggestions. Furthermore, face validity was examined through the pilot test and the administration of the survey. The items were developed with the intention of being transparent, relevant, and easy to understand, and the pilot test allowed respondents to write comments on the individual items and on the survey as a whole.

Cronbach's alpha coefficient was used to investigate the internal reliability of the 63 survey items on the four dimensions of wellness. As indicated, individual scales were developed for each of the four developmental dimensions (physical, psychological, social, and spiritual). The physical developmental scale was further divided into sub-scales to increase the correlations between the items. The first subscale (substance use) included items on the rates of substance use, and the second subscale (health) integrated items related to body weight, physical activity, and nutrition. Their coefficients were 0.65 and 0.67, respectively. The coefficients ranged from 0.86 to 0.92 for the three developmental dimensions (psychological, spiritual, and social) and provided evidence of internal reliability. The total coefficient for the four developmental dimensions was 0.92 and provided support for the wellness construct of this study.

**Figure 2.**  
The study's findings suggest that wellness is multidimensional. The researcher's ideal state of wellness was different than adolescents' perceptions of wellness.



## Process

To proceed with the study, ethical approval was received from the University Ethics Committee. Subsequent permission was received from the chief educational officer of the school district and the principals at both schools. The principals made all of the arrangements for data collection times and dates for the survey. Data collection took place over a one-month period, and all surveys were completed within the two schools previously described. A time was designated by the principal for each class to complete the survey. This process ensured that every student had equal opportunity to complete the survey and that the primary researcher was present to further clarify the directions.

## Analysis

The Statistical Package for Social Sciences (SPSS 16.0) was the software used to analyze data, including descriptive statistics (percentage values and Pearson product-moment correlation coefficients).

## Results

Descriptive statistics were organized to compare the ideal state of wellness (see Figure 1) to the adolescents' responses or the perceived state of

**Table 2.**  
Correlations Between Wellness Perceptions and the Developmental Dimensions Scales

Scale	Wellness Composite
Physical Development Sub-Scale (health)	0.54*
Physical Development Sub-Scale (substance use)	-0.07
Spiritual Development Scale	0.19*
Psychological Development Scale	0.42*
Social Development Scale	0.35*

\* Correlations are statistically significant ( $p < 0.01$ , 2-tailed) ( $N = 280$ ).

wellness. The Pearson product-moment correlation coefficient was used to quantify the relationship between two variables and to illustrate the potential relationship between wellness and the developmental dimensions.

Figure 2 illustrates the comparison between the *Framework for Exploring Adolescent Wellness* or the predicted ideal state of wellness and the data summarizing the adolescents' perceptions of wellness. As depicted in Figure 2, for many participants, the dimensions were not equally important. The majority of youth suggested that psychological (89%), social (85%), and physical (80%) development made the most significant contribution to adolescent

wellness. Slightly more than half of the adolescents responded that spirituality (53%) contributed to their sense of wellness.

Table 2 outlines the correlation analysis used to measure the relationship among the physical, spiritual, psychological, and social scales and wellness. Three categories are used to describe the correlations between the developmental dimensions and the wellness composite (Minimal: 0 to 0.25, Moderate: 0.26 to 0.60, and Strong: 0.61 to 1.0). The analysis of survey responses suggested that an increased sense of wellness was moderately associated with higher scores on the physical health ( $r = 0.54$ ,  $p < 0.0005$ ), psychological ( $r = 0.42$ ,  $p < 0.0005$ ), and social ( $r = 0.35$ ,  $p <$



**Table 3.**  
**Correlations Between Wellness Perceptions and the Items Related to the Adolescent Developmental Dimensions (Physical, Spiritual, Psychological, and Social)**

Developmental Variable	Wellness Composite
<b>Physical Development</b>	
Nutrition	0.18*
Physical activity	0.55*
Body weight	-0.02
Smoking/drugs/alcohol	0.03
<b>Spiritual Development</b>	
Spirituality assists me to be creative and to develop my values.	0.16*
Spirituality means having a sense of connectedness to a higher power.	0.19*
Spirituality is important.	0.16*
<b>Psychological Development</b>	
I have grown up with an affectionate, accepting and loving caregiver.	0.30*
Self-concept (Who am I?).	0.22*
Self-esteem (I feel competent).	0.30*
Self-esteem (I feel worthy of happiness).	0.30*
I have friends who care about me.	0.23*
<b>Social Development</b>	
I feel the people in the school care about me.	0.37*
I feel connected to my school.	0.27*
I feel connected to my peers.	0.33*
I feel that I have the resources to overcome problems.	0.27*

\*  $p < 0.01$  (2-tailed). For each of these variables, the students were asked if the items measuring the physical, spiritual, psychological, and social dimensions affected their development ( $n = 280$ ).

0.0005) development scales. Increased wellness was associated with better-perceived physical health, psychological well-being, and social functioning. Results also indicated a minimal relationship between higher adolescent self-reported levels of wellness and the spiritual ( $r = 0.19$ ,  $p < 0.001$ ) developmental scale. There was no apparent relationship between wellness and the substance use subscale. These data illustrated that many participants understood wellness as multidimensional.

Table 3 presents the Pearson product-moment correlation coefficients with respect to possible relationships between wellness and the individual items measuring each of the four developmental scales (physical, spiritual, psychological, and social). Data indicate the Pearson product-moment correlation coefficients that

examined possible relationships between wellness and individual items measuring each of the four developmental scales. Significant correlations were revealed in all four dimensions. Within the physical dimension, higher adolescent self-reported levels of wellness were related to increased perceptions that nutrition ( $r = 0.18$ ,  $p < 0.001$ ) and physical activity ( $r = 0.55$ ,  $p < 0.0005$ ) affect development.

All variables within the spiritual dimension were minimally significant. Higher ratings of wellness were minimally associated with the beliefs that spirituality assists a person to be creative and develop values. There was a significant relationship revealed between an increased sense of wellness and the belief that spirituality is connected to a higher power, and finally, the perception that spirituality is important. All statements associat-

ed with psychological and social development were significantly correlated with wellness, and may provide support for the notion that increased perceptions of wellness are connected with positive self-concept ( $r = 0.22$ ,  $p < 0.0005$ ), loving caregivers ( $r = 0.30$ ,  $p < 0.0005$ ), and caring friends ( $r = 0.23$ ,  $p < 0.0005$ ). Results suggested that higher student self-reported levels of wellness were moderately associated with increased self-esteem as defined in this study as beliefs of competency ( $r = 0.30$ ,  $p < 0.0005$ ), and perceptions of worthiness ( $r = 0.30$ ,  $p < 0.0005$ ). Finally, higher ratings of wellness were moderately associated with the beliefs that caring people in the school ( $r = 0.37$ ,  $p < 0.0005$ ) and peer connectedness ( $r = 0.33$ ,  $p < 0.0005$ ) contribute to adolescent wellness. Results also suggested a minimal relationship between higher student self-reported levels of wellness and school connectedness ( $r = 0.27$ ,  $p < 0.0005$ ), and perceptions that the adolescent has resources to overcome problems ( $r = 0.27$ ,  $p < 0.0005$ ). In summary, these significant correlations clearly illustrate the relationship between adolescent developmental dimensions and wellness.

## Discussion

The following section presents a discussion of the findings from this study that imply wellness is more than regular physical activity and healthy eating. It is a complex and multifaceted phenomenon. Findings suggested that at least four dimensions contributed to the balance of wellness (physical, psychological, spiritual, and social). However, for many middle-aged adolescents, the dimensions were not considered to be equally important.

The physical dimension findings revealed that both physical activity and healthy nutrition were significantly correlated with wellness. There were no significant correlations between body weight, smoking/drugs/alcohol use, and wellness that suggested the youth may not recognize the potential health issues associated with body weight, and drug and alcohol use in relation to wellness. These findings are cause for concern; Adlaf, Begin, and Sawka (2005) reported that 83% of youth had consumed alcohol within the last year, and 22% had reported harms related to their alcohol use. Similarly, the Canadian Center on Substance Abuse (2007) reported that young people are most likely to use substances and to

experience harm as a result. In the United States, under-age alcohol consumption has been found to be a widespread and persistent public health and safety problem that has created serious personal, social, and economic consequences for adolescents, their families, communities, and the nation as a whole (United States Department of Health and Human Services, 2007).

The findings in relation to body weight are also alarming; Shields (2005) reported that obesity rates among Canadian adolescents aged 12 to 17 years have tripled from 3% to 9% over the last 25 years, and obesity poses both immediate and long-term implications for adolescents (Janssen et al., 2005; Katzmarzyk et al., 2004). Likewise, in the U.S., obesity now affects 17% of all children and adolescents (Ogden, Curtin, Lamb, & Flegal, 2010). This information leads one to question whether the lack of congruency is due to the adolescents' sense of being invincible, lacking knowledge, or perhaps to their susceptibility to pressures to conform. Regardless of the reason(s), the findings from this study illustrate the urgent need for nurses to address these important factors of wellness in our youth.

The spiritual aspect of wellness was evidenced in the youths' responses. Higher levels of wellness were significantly correlated with spiritual beliefs. Those commenting on youth commonly impute that youth tend to reject spirituality or do not practice any form of organized religion. The findings from this study challenge these perceptions; over 50% of the participating adolescents felt that spirituality influenced their wellness and that spirituality was an important resource in their developmental journeys. These findings lend support to the importance of nurses being cognizant of adolescents' views and spiritual beliefs, and provide warrant for nurses to adopt an approach to adolescent nursing care that avoids excluding the spiritual dimension of wellness.

Consistent with the literature, significant relationships within the psychological dimension were also identified (see Table 3). Others have found that nurturing and warm parent/guardian and peer support were indicators for positive achievement in adolescent developmental outcomes, such as emotional and psychological wellness (Helsen, Vollebergh, & Meeus, 2000; McLaren, 2002). This study indicated that a significant relationship existed between higher stu-

dent self-reported levels of wellness and loving/affectionate caregivers, and having friends who care. Other studies have found positive significant relationships between the influence of self-concept and self-esteem on adolescent happiness, degree of coping mechanism, enhanced initiative, and good personal adjustment (Baumeister, Campbell, Krueger, & Vohs, 2003; Canadian Institute for Health Information, 2005). Similarly, the findings from this study suggested a significant relationship between the psychological factors of self-concept and self-esteem and higher self-perceptions of wellness. These findings provide nurses with the insight that adolescents perceive their caregivers and peers as important influences on their sense of wellness, and thus, highlight that these relationships should be considered throughout the provision of adolescent nursing care. Additionally, these findings expand on the growing body of literature examining the relationship between psychological development and wellness, along with illustrating the importance of considering an approach to pediatric nursing that includes a thorough evaluation of adolescent self-concept and self-esteem.

There were also significant correlations in the social dimension of wellness (see Table 3). The roles of the school and peers on adolescent wellness had been investigated in earlier studies (Canadian Institute for Health Information, 2005; May & Katzenstein, 2004; McNeeley, Nonnemaker, & Blum, 2002). Previous findings found that adolescents who reported high levels of peer and school connectedness and caring people in the school also tended to report high levels of self-worth and good health. The present study suggested comparable findings because significant relationships were identified between peer and school connectedness and an increased sense of wellness. Additionally, data indicated a significant relationship between the youths' perception of caring people in the school and higher self-reported level of wellness.

Nursing practice emphasizes health promotion and illness prevention, but it is still common practice, specifically in acute care, to focus primarily on the treatment of illness or the physical dimension of clients. The research findings in this study present evidence to support a multi-dimensional wellness approach to adolescent nursing care. To promote the health of adolescents, nurses need to articulate the notion of wellness clear-

ly, and this means adapting their approach to nursing care to one that maximizes client wellness. The vision presented in the *Framework for Exploring Adolescent Wellness* focuses on a holistic approach addressing all the dimensions of wellness, rather than merely attending to physical dimensions of wellness or extenuating a problem-focused approach.

### Limitations

This study was delimited to a sample of grade 11 youth from just two high schools in one Western Canadian city. Consequently, findings reflect perceptions of a limited context and population of students. Therefore, there may be value in replicating the study with a wider sample of adolescents, with varying grades/ages, and in schools across North America. Although the possibility of conducting further analyses of additional variables, these results were not considered in this study. Future research might include other relevant statistical analysis and comparisons, including evaluating differences between gender and sites. This topic has been under-studied in nursing; however, this exploratory study provides insight into the importance of a holistic approach when assessing adolescent wellness as well as a better understanding of the relationship between wellness and adolescent development.

### Implications for Pediatric Nursing

The most profound revelation of this study was the adolescents' insight with respect to the definition of wellness. For the youth, wellness was a multidimensional idea that entailed dimensions beyond the physical dimension to include healthy relationships, emotional stability, and spirituality. The significance of these research findings indicates the need for nurses to adopt an approach to adolescent nursing care that includes greater use of the practice and philosophy of wellness. More specifically, to improve adolescent wellness, nurses need to include strategies for physical health in relation to obesity and substance use. Nurses should be aware that social relationships with caregivers, peers, school, and psychological factors (such as self-concept and self-esteem) have a significant influence on an adolescent's sense of wellness, and each wellness factor should be considered throughout the provision of

nursing care. Finally, given these adolescent experiences with spirituality, nurses should consider an approach to adolescent care that gives room and priority to the spiritual dimension of wellness. Ultimately, the implementation of the *Framework for Exploring Adolescent Wellness* into practice will lead pediatric nurses to a greater understanding of the holistic needs of the adolescent and to a more effective approach for supporting youth to experience well-being, learning, and life-long success. ■■■

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