CHAPTER II
LITERATURE REVIEW

This chapter gathers the concepts, theories and evidence which relevant to the topic including health promotion paradigm and strategies approach, theory of health behavior, Positive Youth Development concept, Peer Leadership strategy, revolution of Social Change Agent and Health Consciousness concept then volunteerism at the end.

1. Health promotion

1.1 Concept of health promotion

Health promotion is defined as "the process of enabling individuals and communities control over the determinants of health and thereby improve their health" (WHO, 1986). The first international conference on health promotion was organized in Ottawa in 1986 to achieve HFA and beyond (WHO, 1986). The Ottawa Charter proposed that an individual or community should be able to identify and to realize aspirations, to satisfy needs and to cope with the environment. This has brought the empowerment concept through assessment of strategies and action areas of health promotion (Downie et al., 1996).

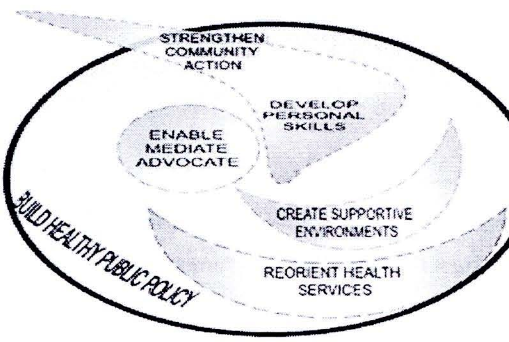

Figure 1 strategies and action areas of health promotion

Describes how the health promotion emblem summarizes the content of the Ottawa Charter: The outside circle, "Building Healthy Public Policies", the first of the action areas of health promotion, encompasses three wings and therefore symbolizes the need for policies to "hold things together". The three wings represent the other action areas, whereas the round spot within the circle stands for three basic strategies for health promotion. It may be interpreted as that the individual and his/ her behavior as well as that of society is regarded as the primary target of health promotion to achieve and to improve the health of nations.

The international conferences highlighted mainly the decision-making process, and the following action (behavior) of the individual is the central core of health promotion (WHO, 2008b): 1) Individuals should be at the center of health promotion action and decision-making processes. To achieve effective participation, equal access to education and information is essential. 2) Health promotion is not something that is done on or to people; it is done by, with, and for people either as individuals or groups. Some of the other points underlined by these conferences are as follows (WHO, 2008b): 1) Health is a human right and a basic social investment, 2) There is a need to apply new government public health policies and commitment by all sectors to close the gap between socially and educationally disadvantaged people and the rest to raise the health status of the community as a whole, 3) Improvement of access to health-enhancing goods and services based on social equity should be the priority, 4) Supportive environments for health have social and economic dimensions. To develop more positive infrastructure of such environments requires assessment and use of the knowledge and skills of women in all sectors, 5) Health promotion should be central to the global developmental agenda, and therefore it is the main responsibility of all governments.

Comprehensive approaches for health development that use combinations of the action areas and strategies of the Ottawa Charter are proposed as the most effective. One of the settings where these strategies can be effectively implemented is in schools. Every child and adolescent has the right and should have the opportunity to be educated in a health-promoting school. Schools provide excellent opportunities to promote the physical, social, and emotional health of students, staff, families, and community members (Jakarta Declaration, for review, see WHO, 2008b). School years are influential stages in people's lives when life-long-sustainable health behaviors are being developed, and the right messages on lifestyles can be reinforced regularly during these years. Furthermore, schools serve as referral systems for transmission of the right messages and knowledge about oral health and behaviors to the parents (Kwan & Petersen, 2003).

The overall goal of health promotion is the balanced enhancement of physical, mental, and social facets of positive health, together with the prevention of physical, mental, and social ill-health (Downie et al., 1996).

1.2 Strategies approach of health promotion

1.2.1 Preventive approaches in health promotion

Rose (1992) described two basic types of preventive approach in health promotion, the high-risk and the population approach. In the high-risk approach strategy, people at particularly high risk are identified through screening tests and offered appropriate treatment and advice (Department of Human Services, 1999; Watt, 2005). In the population approach, measures of public health interventions are implemented to reduce the level of risk in the whole population (Rose, 1992). In terms of action areas of health promotion (WHO, 1986), the high-risk approach may be defined as a tool to develop personal skills, whereas the population approach serves for creating supportive environments and strengthening community action.

1.2.2 High-risk approach

The high-risk approach seeks to protect susceptible individuals and tends to concentrate attention on the disease and risk, failing to recognize its integral links with the state of the population (Rose, 1992). In dental prevention, this approach means that the individuals at high risk for dental caries must first be identified in order to design preventive measures for them (Helminen, 2002). Prevention and education are the approaches in high-risk strategy, and these alone can achieve short-term success, but may widen the health inequalities (Watt, 2005). The effectiveness of intensified prevention procedures of this approach, compared to basic prevention given to low-risk children is questionable (Seppa et al., 1991; Hausen et al., 2000). Furthermore, the compliance of patients with behavioral preventive regimes (healthy diet, regular tooth-brushing) may fail, especially among children (Burt, 2005). In addition to the clinical factors, there is a need to assess the societal factors, oral health, and dietary behaviors in individuals either with high caries activity or those susceptible to caries. Not only professional measures but also alterations improving personal oral hygiene measures such as preventive strategies should be considered (Forss, 1994). This approach is criticized in terms of its underlying concept and long-term success (Rose, 1992; Batchelor & Sheiham, 2002): 1) Prevention becomes medicalized so that people are 'labeled' as unhealthy; that only ill health is taken into account, not positive health, 2) Success is palliative and temporary because this strategy is directed either to protection against the effect of exposure or to reduction in the individual's level of exposure. It does not seek to alter the situations which determine exposure, 3) It is behaviorally inadequate because most health behaviors are shaped by the norms of the particular society, 4) As it considers that the rest of the population is healthy and safe, it fails to deal with the majority of new lesions involved with the changes in caries decline observed to occur throughout populations, not confined to subgroups.

Despite its disadvantages, there are some advantages from a high-risk approach (Rose, 1992) avoidance of interference with those who are not at special risk, 2) offering a cost-effective use of resources, 3) an improved benefit-to-risk ratio. However, all these are available if the target is correct.

1.2.3 Population approach

In population approach, public health administrators set program goals and objectives for the whole population, so that the target is everyone in the population whether healthy or diseased (Burt, 1998). That strategy attempts to control the causes of incidence in order to lower the mean level of risk factors in that population (Rose, 1985). Examples of the population approach include fluoridation of water supplies, dental education through the mass media, and restriction of sugar intake by regulation or financial incentives. This kind of approach is necessary wherever risk is widely diffused through the whole population (Rose, 1985). There is a need to consider the implications of a situation in which a small risk involves a large number of people, who according to the high risk-approach would be categorized as normal (Rose, 1992). Rose notes that population approach is appropriate when personal lifestyle is socially conditioned, and there is a need for social acceptance to change an established habit. When the healthy habit is socially accepted as a norm of the time (such as use of fluoridated toothpaste), the whole population will benefit, with no need for reinforcement (Sheiham & Joffe, 1991). As disadvantages of the population approach, Sheiham & Joffe identify the lengthy periods of time needed to change social norms (such as use of products rich in sugar) and the possible adverse impact of its implementation (such as unemployment in the sugar industry).

1.2.4 Direct population approach

Rose (1992) stated that the high-risk and population approaches are not in competition, and the prior concern should always be to discover and control the causes of incidence. There is a growing international consensus that there is a need for a combination of these approaches (Hausen et al., 2000; Baelum & Lopez, 2004; Burt, 2005; Watt, 2005). Initiatives designed to reduce inequalities in health can be structured by identifying the communities at greater risk for disease and using population strategies within these target groups. This approach is defined as geographic targeting or a direct population approach, focusing on higher-risk groups, communities, or subpopulations (Department of Human Services, 1999; Watt, 2007), and it may be interpreted as aiming to reduce the disadvantages and increase the advantages of a population and a high- risk approach.

1.2.5 Common risk factor approach

A holistic approach and intersect oral collaboration are among the set of guiding principles on developing oral health strategies based on WHO recommendations (Watt, 2007). The Common Risk Factor Approach has the underlying concept that promoting general health by controlling a small number of risk factors that have a major impact on large number of diseases will provide lower cost, and greater efficiency and effectiveness than disease-specific approaches do. The Common Risk Factor Approach focuses on improving health conditions for the whole population as well as high-risk groups, by reducing social inequities (Sheiham & Watt, 2000).

Sheiham & Watt next underline the fact that the causes of major oral diseases, caries and periodontal diseases, are diet, plaque, and smoking; these are also common to a number of other chronic diseases such as heart disease, cancer, and strokes.

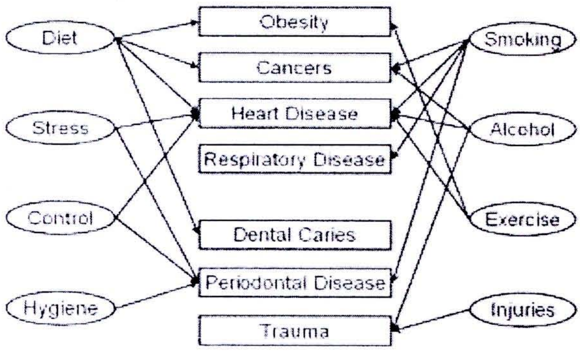

Figure 2 The common risk factor approach (Sheiham & Watt, 2000)

Sanders et al. (2005) has found that body mass index, oral health behaviors, and smoking share a cluster among adults. Among adolescents, those who are more likely to perform health-enhancing behaviors (healthy eating, regular physical exercise) are more likely to experience better dental care (Donovan et al., 1993; Aaro et al., 1995; Neumark-Sztainer et al., 1997). The studies that have found a positive contribution of increased caries prevalence to obesity (Willershausen et al., 2004; Cinar & Murtoma, 2008) and to cardio-vascular diseases (Larsson et al., 1997) among adolescents may provide further evidence for the common risk factors underlying oral and general health.

The Common Risk Factor Approach includes efforts to improve health by reducing risks and promoting the health and empowerment of individuals by creating supportive environments and facilitating behavior change (Sheiham & Watt, 2000). As we known, multi-behavioral consequences of negative health outcomes should also be taken into consideration in preventive policies and health-promotion programs; either a population or high-risk strategy of prevention starts with the recognition that the occurrence of diseases reflects behavior and circumstances of society as a whole or individual lifestyles (Rose, 1992; Forss, 1994). Among children and adolescents, the Common Risk Factor Approach implemented through a population or a direct population approach is preferable for prevention of dental caries and periodontal diseases, because the majority of preventable causative factors for these diseases are environmental (such as tobacco and food policy) and interpersonal (such as family influence on self-care behavior) (Sheiham & Watt, 2000; Kallio, 2001).

2. Theories of health behavior

Theories attempting to explain the formation of health behaviors at an individual level have been developed under a variety of frameworks (for review, see Glanz et al., 1997; Ogden, 1997; Conner & Norman, 2003). These theories are valuable in explaining many aspects of preventive behavior (Pine, 1997) and in providing information on what needs to be changed to promote health behavior, but they do not explain how changes are to be induced (Brug et al., 2005). It is noted that these theories neglect the effects of socio-economic and environmental conditions on health, and that they associate the effectiveness of preventive and curative regimens with each individual's intention to follow required health behaviors (Sheiham, 1986; Brug et al., 2005).

A meta-analysis using the Theory of Reasoned Action and Theory of Planned Action showed that only 20% of variation of intention and 40% of variation of behavior could be explained (Sutton, 1998). Inglehart & Tedesco (1995) noted that existing models fail to account for oral health behaviors comprehensively, because all assume that behavioral change is a function of an individual's thinking and learning history, neglecting the socio-economic factors and time concept, essential components for behavioral change.

Health-behavior theories at the individual level explain the relationship between health behaviors and related factors, assuming a linear causal pattern (Cinar, 2001), while the common criticism of these theories is that no such a linear causal relationship exists (Freeman et al., 1993; Flay & Petraitis, 1994; Bedell & Lennox, 1997; Conner & Norman, 2003). Gochman (1982) described a possible non-linear association of cognitive (self-efficacy, knowledge, beliefs) and affective (feelings, expectations) factors with overt behavioral patterns, actions, and habits relating to health maintenance, restoration, and improvement. Cinar (2001) proposed that bi-causal relationships were not sufficiently predictive to assess alterations in health behaviors regarding the non-linear structure of changes. Cognitive and affective factors underlying the behavioral changes relevant to smoking and alcohol use among adolescents were studied with the Cusp Catastrophe Model (for review, see Carver & Scheier, 1998), which focuses on non-linear patterns of health behavior. It was suggested that this nonlinear model provides a better explanation than does any simple or interactive linear model (Clair, 1998; Byrne et al., 2001). Further, these theories are criticized because they cause the success of health interventions to be less clear at a population level (Glass & Mc. Atee, 2006), and they may result in largely ineffective health policies (Bunton et al., 1991), therefore not tackling health inequalities. Recently emerging theoretical approaches and concepts focus on exploring the basis for health inequalities and underline the importance of social and environmental determinants of health: the Life Course Approach (Kuh & Ben-Shlomo, 1997), the Salutogenic Model (Antonovsky, 1979, 1987), and the Social Capital Approach (Watt, 2002). These theories have provoked considerable debate as to their potential value in contributing to both general and oral health promotion (Watt, 2002). One interpretation is that antecedents of these three approaches lie in the Social Cognitive Theory of Bandura (1986). This theory explains the nature of behavioral change within the context of a triadic reciprocal relationship between behavior, interpersonal (cognitive-affective components of behavior, and biology) and external (e.g. socio-economic, environmental) factors. Therefore, social support, and the individual's behavior, and cognition and affect influence each other (Bandura, 1986, 1997). The Social Cognitive Theory proposes that an individual's belief in his/her capacity to perform a certain type of behavior, self-efficacy, develops by individual experience, observation, modeling, and social persuasion. Increased levels of self-efficacy have been successful in adoption and maintenance of positive oral health behaviors (Stewart et al., 1996; Syrjala et al., 1999).

There has recently been increasing interest in conceptualizing chronic disease etiology within a life-course framework (Hertzman & Power, 2003). The Life Course Approach aims to assess the effects of physical, psychological, and socio-economic exposures on chronic-disease risk throughout the individual's life-span. The long-term effects of these risk factors on chronic diseases are investigated at five main life stages; gestation, childhood, adolescence, young adulthood, and adult life (Bartley et al., 1997; Kuh & Ben-Shlomo, 1997; Ben-Shlomo & Kuh, 2002). Genetic inheritance and pre-natal and post-natal development within the social and physical environment influence the health of the individuals throughout all of their lives (Kuh et al., 2003).

Moreover, dental caries and periodontal diseases develop over time (Fejerskov & Kidd, 2003). Exposures to risk factors early in life are involved in initiating diseases' processes prior to clinical manifestations (Lynch & Smith, 2005), and therefore studies have found that gingival bleeding and dental caries among adolescents have early-life implications (Nicolau et al., 2003a, 2003b). Findings by Peres et al. (2005) reveal that social and biological risk factors accumulated in early life contribute to the high level of dental caries in childhood. As an example, low birth weight and a poor socio-economic and psychological family profile experienced by preadolescents during their developmental periods continue to negatively affect height and dental health throughout the life course (Poulton et al., 2002; Nicolau et al., 2003b, 2005). Furthermore, socially patterned exposures during childhood and adolescence may account for socio-economic inequalities in adult health (Kuh et al., 2003).

The Salutogenic Model was proposed by Antonovsky (1979, 1987) who developed the model based on the idea that health was a movement in a continuum on an axis between total ill health and total positive health (Eriksson et al., 2007). It is a psychosocial model that considers the factors for moving towards good health; with the central construct on General Resistance Resources (GRRs) and Sense of Coherence (SOC) (Antonovsky, 1996; Watt, 2002; Lindström & Eriksson, 2006). GRRs are biological, material, and psychological factors that make it easier for people to perceive their lives as consistent, structured, and understandable. Typical GRRs are income, experience, self-esteem, healthy behavior, social support, social and cultural capital, and intelligence (Lindström & Eriksson, 2006). An individual with a strong SOC has the ability to define life events as less stressful, to mobilize resources to deal with encountered stressors, and to possess motivation (Savolainen et al., 2005). The SOC is defined as: "A global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic feeling of confidence that is comprehensible, manageable, and meaningful" (Antonovsky, 1979, 1987).

The Salutogenic Model proposes that the stronger the SOC that the individuals and groups have, the more adequately they can cope with stressors and maintain their health status (Antonovsky, 1979, 1987). This theoretical model as a health promotion tool focuses on solving problems by identifying the problems and the GRRs for helping people to move in the direction of positive health. The key is not what is available; it is the ability to use and re-use available GRRs to construct coherent life experiences for promotion of a strong SOC (Lindström & Eriksson, 2006). In terms of oral health care, Savolainen & coworkers (2004, 2005) have found associations between regular dental attendance and higher SOC, and the increased probability of having good oral hygiene and the frequency of recommended tooth-brushing with a strong SOC, among adults. It has been proposed that an SOC begins to develop at an early age, and a tentatively strong SOC can be achieved (Lindström & Eriksson, 2006). Studies among children and adolescents are scarce. Maternal SOC has been shown to be associated with children's dental caries and levels of periodontal diseases, as well as dental attendance (Freire et al., 2002). An SOC is also identified as a psychosocial determinant of adolescents' oral health behaviors, particularly affecting their pattern of dental attendance (Freire et al., 2001).

The Social Capital Approach assesses how the features of social organization such as social trust, support, and degree of involvement in social and community issues in a community influence health measures like life-expectancy rates, and mortality rates from chronic diseases (Watt, 2002). The integrative focus of this approach is that micro (groups, family, social networks), macro (work-sites, communities, schools), and mezzo (national/state organizations) institutions co-exist in a society, and these can complement each other. Social capital can facilitate meeting social, ecological, and political goals, and it can also be a mediating agent between them (Cullen & Whiteford, 2001). Therefore, these societies with high levels of social capital have better general health and lower levels of morbidity and mortality (Woodcock & Narayan, 2000). In terms of adolescents' oral health, neighborhood empowerment: An indicator of social capital seems to play an important role in explaining inequalities in the levels of dental caries (Pattussi et al., 2006). Furthermore, poor socio-economic conditions and low levels of social cohesion were found to positively correlate with increased levels of dental caries among 12 years old (Pattussi et al., 2001). Recently, a fourth framework, the modified System Theory model, integrating the Salutogenic Theory and Social Capital Approach, was proposed by the European Health Promotion Development for Maintenance and Improvement of Health (Bauer et al., 2003). Original System Theory (Von Bertalanffy, 1950) suggests that the whole cannot be predicted accurately by examining the parts of the system because it is by their continuous interaction that the whole and homeostasis at a population is formed (Anderson & Ross, 1998). Systems Theory is somehow a critique of reductionism which has the core assumption that a phenomenon is best understood by breaking it into parts and then studying the parts in terms of cause and effect. It is suggested that this theory should be integrated into health promotion strategies such as tobacco control, to improve the synthesis and translation of research findings (Best et al., 2003). The modified System Theory model (Bauer et al., 2003) is a socio-ecological model identifying the systems-based primary action areas of the Ottawa Charter as individual, community, organizations, policies, and environment. This model can be integrated to maintain and to improve any of these systems so that the system in focus (e.g. individual) continuously interacts with its socio-ecological environment that includes the other systems affecting each other and the system in focus. The health of the focal system, a continuum between positive health (salutogenesis) and disease (pathogenesis), is reproduced and improved over time by the quality of the structure and process of the system and its environment. Structure and process have three dimensions: a socio-economic dimension (social-capital and socio-economic status), a cultural (mind, psyche, values, norms), and a physical/ ecological dimension (the body) (Bauer et al., 2003).

3. Positive Youth Development (PYD)

3.1 Scope and concept

All young people require access to positive experiences, both in schools and in their communities. Those spending time in communities with a wealth of opportunities encounter less risk and ultimately show evidence of higher rates of successful into responsible adulthood (Eccles & Gootman, 2002). Adolescents who have a positive transition from the teen years to adulthood also have the potential to be more civically engaged. This civic involvement can result in stronger community ties for them as they work to improve and/or maintain the neighborhoods in which they live. Due to these benefits, the youth development field has seen a shift from focusing efforts solely on preventing youth from engaging in problematic behavior to examining the effects of positive youth development.

Positive youth development focuses on all the resources and assets in a community that offer young people positive choices, experiences, and support (Lerner, 2004; Pittman, Irby, & Ferber, 2001). The role of positive youth development is to form affirming relationships between young people and caring adults and to use the skills of both in order to strengthen youth-related programs. Funding sources also began reiterating the fact that researchers and practitioners in the youth development field should take a more approach to incorporate methods that highlight the positive aspects of youth. As a result, researchers and practitioners began to examine the role of resiliency, how protective factors in a young person's life could influence the ability of young people to overcome adversity. The concept of "resiliency", as applied to young people grew out of the work of such pioneers as Norman Garmezy, Emmy Werner, Ruth Smith, Michael Rutter, and Arnold Sameroff beginning in the later 1960s and early 1970s. (Sameroff A.J. and Chandler M.J., 1975; Garmezy N., 1974; Rutter M., 1979; Werner E.E., Bierman J.M. and French F.E., 1971; Werner E.E., Smith R.S., 1977). Especially known for its longevity is the work of Werner and Smith who followed a cohort of children born in 1955 on the Island of Kauai at risk for negative outcomes including poverty, family instability, and health problems. The participants in this study were followed until their 40s, and were assessed at birth, infancy, childhood, late adolescence, and in adulthood. The investigators found that many of the children experienced negative outcomes as they entered adolescence and adulthood including teen pregnancy, delinquency, and mental health problems (Werner E.E., Smith R.S., 1992). The investigators also found that despite the challenging contextual conditions for these young people, approximately one third of the children became competent and successful adults. The process in which individuals show positive outcomes, despite adversity, is referred to as resiliency (Masten A.S., 1994). Resiliency refers to a pattern of behavior, rather than an individual attribute. In fact, the resiliency construct is grounded in an ecological model that emphasizes the importance of factors extrinsic to the individual along with key intra-individual assets in promoting healthy youth development.

3.2 Paradigm

The concept of Positive Youth Development based on Resiliency paradigm which compose of 2 important keys: Risk factor and protective factor the focus on identifying and understanding risk and protective factors intensified through the work of the Kauai investigators, guided by a resiliency paradigm. Risk factors are elements and experiences in a child or adolescent's life that increase the likelihood of negative outcomes and decrease the likelihood of positive outcomes. Werner and Smith, for example, examined factors related to negative outcomes in their study of children on the Island of Kauai and found that poverty, low maternal education, family instability, single parenthood, and health concerns were related to problems during adolescence and into adulthood (Werner E.E., Smith R.S., 1992; Werner E.E., 1989). Subsequent research has shown that the effects of risk are cumulative, such that exposure to multiple risk factors at a single point in time or over time increases the likelihood of negative outcomes (Rutter M.,.1979; Masten A.S., Wright M.O.D., 1998). Protective factors, on the other hand, are events or experiences that reduce the likelihood of negative outcomes and increase the likelihood of positive outcomes. Protective factors have been defined as both bipolar and unipolar constructs (Masten A.S., 2001). As a bipolar construct, risk is at one end of the continuum and protection at the other. For example, academic achievement is related to numerous positive outcomes, whereas low achievement increases the likelihood of negative outcomes. Unipolar constructs represent a continuum of an attribute, but the absence or diminished amounts of the attribute are not necessarily associated with greater risk for negative outcomes.

Volunteerism and involvement in extracurricular activities are examples of unipolar constructs. Participation in more extracurricular activities, for example, may be associated with better outcomes, but not participating in these activities may not increase the likelihood of negative outcomes. Risk and protective factors have several similar qualities. First, both can be intrinsic (e.g. humor, temperament) or extrinsic (e.g. exposure to violence at school) to an individual and can occur at all levels of influence: At the individual level, within a family, at school, or within the community. Second, risk and protective factors tend to co-occur within individuals, such that an individual with one risk or protective factor is likely to be characterized by another. Generations of research have amply demonstrated the clustering of risk factors (Bachman J.G., O' Malley P.M., Johnston L.D., 1980; Jessor R., Jessor S.L., 1977) as well as the covariation of protective factors. (Donovan J.E., Jessor R., Costa F.M., 1993) Finally, effects of risk and protective factors are not entirely uniform across social groups. For example, a study of youth violence showed that working (Jessor R., Jessor S.L., 1977) or more hours per week was a risk factor for boys, but not for girls. (Resnick M.D., Rinehart P.M., 2004) on the other hand, low self-esteem was a risk factor for violent behavior among girls, but not for boys. Thus, a risk or protective factor for one group of youth may not be as powerful a risk factor or protective factor for another group. (Rutter M., 1993; Luthar S.S., Zigler E., 1991)

3.3 Empirical evidence for protective factors

Emmy Werner (2001) and Ruth Smith were among the first to investigate protective factors in the lives of youth. They examined factors that contributed to the positive outcomes experienced by the youth in the Kauai study, despite being exposed to risk. They found that youth who experienced more positive outcomes were more likely to have (1) a close relationship with a role model or a caregiver, (2) an easy temperament, (3) friends and interests, and (4) good language and reasoning skills. 25 many studies have now examined factors that protect youth from negative outcomes and a recurring set of positive attributes, events, and experiences have been identified across studies. (Sameroff A.J., Barocas R., Seifer R., 1984; Masten A.S., Garmezy N., 1990; Long J.V., Vaillant G.E., 1984) a review of the resiliency literature by Masten (1994) reported 10 factors that buffered youth from a variety of risk factors including parental mental illness, economic hardship, teen parenting, maltreatment, and delinquency. The 10 protective factors in her review included (1) effective parenting, (2) connections to no parental adults, (3) appeal to others, particularly adults, (4) intellectual skills, (5) talent or accomplishments valued by others, (6) self-efficacy, self-worth, and hopefulness, (7) religiosity, (8) socioeconomic advantages, (9) school and community assets, and (10) fortuitous circumstances. Although many protective factors have been identified through resiliency research on at-risk populations, it has become clear that most youth benefit from these factors, whether they are at heightened risk for negative outcomes or not. Thus, recent research has begun to focus on the effects of protective factors not only in high-risk populations but also in the lives of adolescents in general, using cross-sectional and longitudinal surveys of youth health and behavior. Prominent among these are analyses of the National Longitudinal Study of Adolescent Health (Add Health). Add Health is one of the most comprehensive current surveys of health behaviors among adolescents in the United States. These data have been used extensively to examine the role of protective factors in the general adolescent population. The study began in 1994 with 90,000 adolescents from 80 communities across the United States. The subsequent core cohort of approximately 20,000 youth has been followed for three waves of data collection, with a fourth under development. The study, ordered by Congress, was designed to examine how social contexts (i.e. families, schools, and communities) affect health and behaviors among adolescents, and includes assessments of both risk and protective factors. A primary goal of this study was to provide decision makers with information on key determinants of adolescent health and behavior. Beyond its obvious research applications, results from the Add Health study have been used for advocacy, curriculum, program, and policy development, and grant writing at local, state, and national levels to further develop services for youth. Data from the Add Health study are being used extensively to understand success and wellbeing among young people, particularly those living in challenging environments. Add Health analyses demonstrate that connectedness to family, other adults, school, and community are robust, recurring protective factors across social groups of young people. (Scal P., Ireland M. and Borowsky I.W., 2003; Resnick M.D., Ireland M., Borowsky I., 2004; Sieving R.E., Mc. Neely C.S., Blum R.W., 2000; Henrich C.C., Brookmeyer K.A., Shahar G., 2005; Svetaz M.V., Ireland M., Blum R., 2000; Resnick M.D., Bearman P.S., Blum R.W., et al., 1997) for example, examined risk and protective factors for four domains of adolescent health including emotional health, violence, substance use, and sexual behaviors and outcomes among adolescents in grades 7 to12. They found that parent-family connectedness and school connectedness were protective factors for all health behaviors studied except history of pregnancy. Since that initial analysis, collectively, these studies show that various dimensions of connectedness serve to protect youth against a broad range of health-risk behaviors, with applicability across gender, race, and ethnic groups. (Resnick M.D., 2000) These findings on connectedness accentuate the importance of attachment in healthy human development, which has had a long history in the child development and psychiatry literature. (Ainsworth M., Blehar M.,Waters E.,Walls S., 1978; Bowlby J., 1969 and Bronfenbrenner U., 1979) Analyses also demonstrate that these dimensions of connectedness appear more important than demographic characteristics, such as family composition (e.g. two parent vs single parent), in protecting youth against high-risk behaviors. (Resnick M.D., Harris L.J., Blum R.W., 1993) Recent advances in technology have also furthered the scientific evidence supporting the importance of connectedness in the lives of adolescents. Laboratory research, for example, on animals to brain imaging studies on adolescents and young adults suggest that human beings are biologically "hardwired" to connect with others, and to seek meaning and purpose in life. Specifically, this research shows that the experience of connectedness stimulates reward mechanisms in the brain. (Dartmouth Medical School, 2003) Understanding the dynamic interplay of risk and protective factors has also been enabled by the breadth and scope of the Add Health study.

Researchers argue that it is an imbalance in risk and protective factors in the lives of adolescents that result in negative outcomes. That is, youth may develop into competent adults despite numerous risk factors, if there are adequate protective factors in their life. 41 Add Health analyses have focused on the likelihood of involvement in high levels of violent behavior on the basis of varying combinations of risk and protective factors. (Resnick M.D., Rinehart P.M., 2004) Longitudinal results demonstrate that protective factors can buffer the effects of risk factors. Among youth who were characterized by all the risk factors examined (e.g. repeating a grade, carrying a weapon to school, being a victim of violence, and high levels of emotional distress), and none of the protective factors (e.g. feelings of connectedness to family and other adults, high parental school expectations, high-grade point average, and religiosity), 71 percent of boys and 61 percent of girls were predicted to be involved in violent behavior at the time of survey follow-up. In contrast, the likelihood of involvement in violent behavior was significantly reduced for boys and girls still characterized by all risk factors but also with all of the protective factors present (42% for boys and 21% for girls).

The resilience literature provides a compelling rationale for redirecting interventions from the traditional emphasis on the prevention and treatment of problem behaviors to capacity building in youth. Youth development programs informed by the resiliency framework work to develop skills, competencies, and positive experiences with caring adults who have high expectations and a positive attitude toward young people. Although youth development programs vary greatly in both their focus and strategies, they tend to be guided by a philosophy that regards young people as inherently capable, with an emphasis on deliberately cultivating their talents and skills. Such programs also accept the premise that healthy youth development is a complex process that cannot be left to chance alone. (Resnick M.D., 2005) Although some communities and families are already providing the nutrients required for youth to succeed in the second decade of life, others are not. Thus, healthy youth development is the deliberate process of providing all youth with the support, relationships, experiences, resources, and opportunities needed to become successful and competent adults (Center for Youth Development and Policy Research, 2005).

3.4 Components of positive youth development programs

Empirical studies on risk and protective factors have important implications for programs and social policies designed to promote healthy youth development. (Garmezy N., 1971; Rutter M., 1979) The following section provides an overview of some critical elements of youth development programs. Although several of the elements listed are essential elements of all successful prevention and intervention program, the author discuss the elements as they pertain to youth development programs:

1) Programs should be informed by pertinent theories and incorporate validated strategies and/or best practices

Empirical evidence is increasingly available about "what works" to promote healthy youth development. Many protective factors have been repeatedly identified and shown to be effective in promoting positive outcomes. Consideration of the population targeted by the program and the specific risk factors being addressed (e.g. violence exposure, maltreatment, poverty), however, need to be considered when selecting specific intervention targets. Many studies show that risk and protective factors are fairly consistent across gender, race, and ethnicity. However, some differences do exist as to how risk and protective factors work for different groups and in different contexts. Thus, in addition to theory, findings from research studies examining the specific population being targeted should be used to guide the selection of applicable risk and protective factors (Rew L., 2005).

2) Promote protective factors and reduce risk factors

It has long been debated whether youth programming should focus on reducing risk factors, promoting protective factors, or both. Recent research suggests that the most effective strategies for reducing health jeopardizing behaviors are those designed to simultaneously reduce risk factors and promote protective factors. Empirical evidence regarding the importance of developing competencies, building capacity, and enhancing connectedness calls for schools and communities to promote a strong sense of connection while enhancing young people's competencies by providing them with opportunities to develop new skills and use them to be of help or service to others. (Resnick M.D., Harris L.J., Blum R.W., 1993) Providing opportunities for youth to contribute, by assuming meaningful roles in their school and community, is critical for healthy development. Providing young people with the support and opportunities they need throughout adolescence requires supporting youth development programs in school and communities and providing adequate funding to sustain these programs over time.

Although promoting protective factors is a critical element of prevention and promotion programs, this does not negate the urgency of addressing fundamental threats to health, such as poverty. Promoting healthy youth development through programmatic means must be coupled with policy-based approaches that address the broader social determinants of health. Such change will occur only in the face of strong and ongoing advocacy by those working with and on behalf of young people (Resnick M.D., 2005).

3) Multiple behaviors and multiple systems focus

In contrast to the targeted focus of categorical programs, a generation of research on risk and protective factors for young people has underscored the utility of addressing multiple behaviors and outcomes through multilevel interventions. Results from the Add Health study, for example, show that parent-family connectedness and school connectedness are protective factors for emotional health, violence, and substance use. Multilevel interventions have amply demonstrated that reducing risk factors and promoting protective factors in ways that both enhance youth competence and transform their social environments result in multiple, positive long-term outcomes for young people. Some of these interventions have affirmed the desirability of implementing dual generation programs that include both young people and the adults that care for them. (Lonczak H.S., Abbott R.D., Hawkins J.D., Kosterman R., Catalano R.F., 2002; Philliber S., Kaye J.W., Herrling S., West E., 2002) The growing evidence on the short-term and long-term impact of such youth development programs suggests that targeting a critical set of risk and protective factors at the individual and contextual levels will increase the likelihood of sustained positive results, beyond the narrow focus of one or a few risk behaviors (Roth J., Brooks-Gunn J., Murray L., Foster W., 1998).

4) Focus on prevention and health promotion

Healthy youth development programs developed from a resiliency framework suggests a focus on positive rather than negative outcomes. For programming purposes, this suggests that the primary focus should be on preventing problems before they begin when possible (primary prevention), and focusing on secondary prevention when necessary, including the reduction of risk factors and enhancing protective factors. However, there is general consensus that becoming a competent and successful adult requires skills and competencies above and beyond being free of problems. As articulated so clearly by Karen Pittman, "Problem free is not fully prepared" (Pittman K., 1991). Thus, promoting healthy youth development involves the development of skills and other competencies, not just preventing negative outcomes. Creating opportunities for youth to participate in challenging and interesting learning experiences, providing leadership opportunities for youth, and building social and academic competencies are among the critical components needed to promote healthy youth development.

5) Appropriate duration and intensity

A substantial body of research demonstrates that the duration and strength of an intervention must be tied to the challenges facing intervention participants. (Perry C.L. et al., 2000; Schorr L., 1998; Perry C.L. et al., 1993) in other terms, the intensity of the intervention must match the intensity of the need. This principle, often neglected because of budgetary constraints and other operations considerations, is nonetheless integral to the success of youth development efforts. (Resnick M.D., 2000; Resnick M.D., 2005; Roth J., Brooks-Gunn J., Murray L., Foster W., 1998; Pittman K., 1991)

3.5 Evaluation

Evaluations of youth development programs are needed to examine whether the programs work to change desired outcomes and for whom they work. Evaluations are needed to assess both short-term and long-term outcomes for young people as well as for families and other systems that may be the target of the intervention. Understanding what works for whom is an enduring question that will continue to challenge as the social diversity grows in the coming decades. The processes that lead to better outcomes for individuals, families, and social systems that reflect the variety of social groups need to better understand. 50 understanding what works for whom will enable practitioners and policy makers to tailor their efforts more effectively for the populations they are serving. And although the need for such understanding is self-evident, considerable obstacles remain that hamper evaluation from becoming a mainstay of youth development programs. Overcoming these obstacles will require strategic advocacy and persuasion directed at funders and other decision leaders. Scholars and practitioners will need to effectively join their voices so that the urgency that surrounds the process of addressing serious, substantive problems does not obscure the need for investment in systematic investigation into what works, with whom, and why.

In conclusion, the philosophy of youth development for programs, policy is to reducing risks, enhancing protective factors at the individual and contextual levels, and promoting confidence and competence in young people in ways that will serve them now and in the future.

4. Peer leadership

The literature on peer education uses various terms to describe those working in peer-led programs, including peer educator, peer leader, peer supporter, and youth peer educator. While peers are meant to be similar in basic characteristics to those in their target audience, some programs find it more advantageous to use “peers” who are slightly older, or otherwise different, from their audience. In general, peer education is defined as a process, a strategy, a communication channel, and a tool. Most commonly, in terms of youth, it is viewed as a "process whereby well-trained and motivated young people undertake informal or organized educational activities with their peers (those similar to themselves in age, background, or interests)".

Peer-education activities generally take place over a period of time. The goal is to develop knowledge, attitudes, beliefs, and skills needed to engage in healthy behaviors. As a strategy, peer education programs train representative adolescents by providing information on adolescent RH or HIV/AIDS. In turn, these youth are expected to convey this information to their peers. Communication may take place in large group meetings or social events; in smaller, focused discussions; or in one-to-one exchanges between a peer educator and target youth. Finally, peer education is considered one of many tools available to reach young people with information and skills. It is typically used in conjunction with other means of communication and information dissemination, such as media campaigns, advocacy by celebrity spokespersons, and youth-friendly services.

Activities in peer education programs vary widely in the type and frequency of activities, the number and intensity of contacts, and the frequency of follow-up. Settings include schools, universities, clubs, churches, street settings, workplaces, barracks, or wherever young people gather. Peer education is often undertaken because it is thought to be an easy and convenient way to reach a large number of people with information, using inexpensive, volunteer staff. But when done well, peer education requires intensive planning, coordination, supervision, and resources. There are program costs inherent in each element of a peer education program: Training, support, supervision, supplies, and allowances. All of which require realistic budgeting and careful monitoring. Peer education programs do not take place in a vacuum. Rather, they are shaped by, and respond to, prevail social norms and community contexts. To be most effective, programs must consciously define the context in which they function, and determine whether restrictive expectations exist that must be challenged, or whether supportive networks and institutions are present that can be strengthened and enhanced. Either situation may require mobilization of key stakeholders-parents, teachers, health workers, and religious leaders. Peer education programs also have a growing role in advocacy, promoting support for the rights of young people to scientifically accurate information about RH and HIV/AIDS, and where needed, access to youth-friendly services.

Peer education programs draw on various theoretical approaches to help shape interventions. Individual cognitive theories and theories of collective action and group empowerment, drawn from the fields of health psychology, health education, and public health: Explain why people adopt new behaviors and provide a rationale for peer-based approaches. See below for a summary of the major theories and models of behavior change particularly relevant for peer education.

4.1 Theoretical frameworks used in peer education (United Nations Population Fund, Family Health International, 2005).

4.1.1 Social learning theory, largely from the work of psychologist Albert Bandura, holds that people learn through direct experience, as well as through the observation of role models. It also contends that people learn through training that develops self-efficacy, for example through practice of responses to simulated situations.

4.1.2 Theory of participatory education, utilized by adult educator Paulo Freire, proposes that the full participation and empowerment of the people affected by a problem is essential in order to enact change.

4.1.3 Diffusion of innovations theory emphasizes that influential leaders and respected individuals influence norms by disseminating information through one-to-one contacts and group discussions. Friendship groups and social networks are important routes of communication and change.

4.1.4 Theory of reasoned action states that the intention to adopt a new behavior is influenced both by the subjective beliefs of an individual and by his or her normative beliefs, i.e. how norms or community standards influence an individual.

4.1.5 Health belief model explains health behavior through an individual's perceived susceptibility, barriers, and benefits. That is, if a person desires a particular health outcome, he or she will take actions to help bring about that outcome.

4.1.6 Social ecological model for health promotion includes multiple influences on behavior, with the individual only one part of the process. Thus, behavior change is determined by characteristics of the individual, as well as interpersonal processes and social networks, membership in institutions, community factors, and public policy.

4.1.7 IMBR model focuses on information (**I,** the "what"), motivation (**M,** the "why"), behavioral skills (**B,** the "how"), and resources (**R,** the "where") used to target unhealthy behaviors.

4.1.8 Developmental theory focuses on the transition from adolescence to adulthood and the strong role that peers exert in influencing behavior of age mates and social companions.

4.2 Mission of peer leaders

4.2.1 Critical thinking peer education should do more than transmit knowledge and strategies to avoid sex. It must help young people confront the inequities that lead many of them to engage in risky sexual behavior, including unequal gender norms. Awareness of social constraints does not mean that young people have the power to change social realities. Adults need to practice critical thinking as well and work alongside young people, and adult allies should be drawn into open and honest discussions about youth sexuality. Adults must accept that young people, both girls and boys, are curious about sex or may enjoy having sex. Supporting young people means being realistic about what youth are really doing, not what adults may wish them to do.

4.2.2 Identity and solidarity in adolescence and young adulthood, feelings of solidarity toward the peer group become very important to young people. Peer relationships and sexual behavior norms greatly influence the behavior of individuals. To be effective, peer education programs must be led by young people with whom the target group feels a sense of solidarity. Ideally, peer educators should be well-known and trusted members of the local community.

4.2.3 Empowerment, motivation, and confidence young people will be more likely to take control of sexual health if they feel in control of other areas of their life and if they are given the respect and recognition they need to develop self-confidence and the power to act responsibly. To develop such confidence, youth need opportunities to develop experience and achieve success, identify with positive role models, and gain appropriate social support, both within the family and the community.

4.2.4 Supportive social networks a well-designed and implemented peer education program needs supportive social networks to succeed. For example, in societies where gender discrimination and stigma about HIV underlie the reproductive and sexual choices of young people, organizations supporting the peer education program may need to focus on changes in social norms in order to change unhealthy behaviors among youth.

4.2.5 Access to services and resources effective partnerships between peer education programs and health and social welfare agencies can facilitate needed access to services for youth. Staff of other programs need to welcome and accept youth, particularly those who may be sexually active or infected with HIV.

5. Health consciousness

Health consciousness is a particularly important psychographic variable in further developing audience segmentation pertaining to health issues because previous studies have shown that health consciousness predicts a variety of health attitudes and behaviors (Furnham & Forey, 1994; Gould, 1988, 1990; Iversen & Kraft, 2006; Jayanti & Burns, 1998; Michaelidou & Hassan, 2008; Schafer, Schafer, Bultena, & Hoiberg, 1993). It is also believed that an individual's level of health consciousness is closely related to how he or she seeks and responds to health information (Basu & Dutta, 2008; Dutta-Bergman, 2004b, 2005, 2006; Dutta, 2007; Dutta & Feng, 2007; Iversen & Kraft, 2006; Kaskutas & Greenfield, 1997; Shim, Kelly, & Hornik, 2006). Therefore, taking heed of individuals' health consciousness is important in designing health interventions and segmenting target publics, because it determines their responses to health information and sources of health information.

5.1 Revolution of health consciousness definition

Different approaches to the concept of health consciousness have generated different definitions of the concept. However, five components have consistently appeared in studies over the previous two decades, which are (1) integration of health behavior, (2) attention to one's health, (3) health information seeking and usage, (4) personal health responsibility, and (5) health motivation.

Dimension 1: Integration of health behaviors

Like Slater and Flora (1989), Kraft and Goodell (1993) equated individuals' health consciousness to their orientation toward a wellness lifestyle. To Kraft and Goodell (1993), wellness is a "set of personal activities, interests, and opinions related to one's health" (p. 18). Kraft and Goodell (1993) identified four sub-dimensions of wellness (1) concern for hazardous environment, (2) physical fitness, (3) personal responsibility, and (4) nutrition and stress management and concluded that health conscious persons are characterized as being sensitive to health hazards, responsible for their health, concerned about their physical fitness, and concerned with managing their stress and nutrition. Except for four items that measure personal health responsibility, Kraft and Goodell's (1993) items are devoted to measuring individuals' actual behaviors. For example, the items include, "I try to exercise at least 30 min. a day, 3 days each week", "I avoid foods containing nitrites or preservatives", and "My daily meals are nutritionally balanced", Likewise, many studies in consumer marketing have also approached individual health behavior and/or attitude from a "healthy (wellness) lifestyle" standpoint. Bloch's (1984) study was a pioneering work in this area and defined a healthy lifestyle as an individual health orientation toward preventing possible health problems and increasing personal wellbeing.

Such a trend in consumer marketing research has presumably stemmed from the field's interest in the food industry's marketing strategies to attract consumers' attention, which necessitated immediate or direct measures of potential consumers' behaviors rather than a conceptual explication of consumers' psychological states. Because of such purposes, in most of the research relating to this approach, the level of health consciousness was oftentimes understood and measured in terms of individual behaviors, such as food consumption and physical activities (Divine & Lepisto, 2005). Jayanti and Burns's (1998) definition of health consciousness "the degree to which health concerns are integrated into a person's daily activities" clearly demonstrated the behavioral aspect of the concept (p.10). For example, Divine and Lepisto (2005) noted that people who enjoy healthy lifestyles tend to prefer to exercise more often and eat white meat, fruits, and vegetables, while avoiding red meat, snack chips, and soft drinks. Similarly, Dutta-Bergman (2004a), referring to health consciousness as healthy activities, used four health-related actions to measure individuals' levels of health consciousness on a 6-point likert scale: Healthy eating, exercising, alcohol consumption (negative correlation), and gambling (negative correlation). Using a national survey, Tabacchi (1987) introduced four groups based on attitude and behavior solely in terms of food consumption: Traditional, weight-conscious, health-conscious, and uncommitted. In Tabacchi's (1987) categorization, a health-conscious consumer is different from a weight-conscious consumer, who mainly cares about his or her calorie intake. The characteristics of the health-conscious group include frequent exercise, having a small-size family, and college education. Specifically, in terms of food consumption, the health-conscious group prefers vegetables and fruits, whole grains, broiled or baked fish, and non-fat milk, while avoiding butter/margarine, chemical additives (e.g. sugar substitutes), soda, and fried foods (Tabacchi, 1987). From another survey of Chinese females, Tai and Tam (1997) found that "weight consciousness", "health consciousness", and "environment consciousness" significantly influenced respondents' daily routines. In regard to the detailed items of the survey, the items designed for measuring weight consciousness and environment consciousness also contained health behaviors, including food purchase/consumption and exercise habits, which other studies claimed to be measures of health consciousness (See Appendix 1 for detailed questionnaires of previous research).

Dimension 2: Psychological/Inner state

Gould's (1998; 1990) viewpoint, however, is somewhat different from those presented in the aforementioned studies. Gould (1998) considered health consciousness solely as a psychological or inner status of a person, including health alertness, health self-consciousness, health involvement, and self-monitoring of one's health. To Gould (1998; 1990), health consciousness is a psychographic variable that is not integrated with visible behaviors. Therefore, measures of attitude and behavior regarding health care and prevention as dependent variables are predicted by health consciousness as an independent variable (Gould, 1988, 1990). For instance, Gould (1990) found that health consciousness was positively correlated with one's dietary lifestyle, such as vitamin intake and calorie reduction, although it was not related to the amount of physical activity. It was also found that high health conscious people are more likely to talk about health and read health magazines (Gould, 1990) and more open to unorthodox medical alternatives while being less skeptical of medical authority (Gould, 1988).

Iversen and Kraft (2006) followed the Gould's (1988; 1990) contention of health consciousness, which focused on one's psychological or inner state. According to Iversen and Kraft (2006), health consciousness is defined as "the tendency to focus attention on one's health". However, Iversen and Kraft (2006) noted that health consciousness is different from health anxiety or fear of being sick or dead. By employing Gould's (1988; 1990) Health Consciousness Scale, Iversen and Kraft (2006) also found a positive correlation between health consciousness and preventive health behavior (e.g. fruit and vegetable consumption and exercise).

Dutta-Bergman (2004b; 2006) and Dutta (2007) also emphasized the psychological characteristic of health consciousness, and tried to differentiate it from three other indicators of health orientation, which were (a) health information orientation, (b) health beliefs, and (c) healthy activities. In this regard, Dutta-Bergman's (2004b; 2006) and Dutta's (2007) conceptualization of health consciousness corresponds to that of Gould (1988; 1990) and Iversen and Kraft (2006), while their general notion of "health orientation" (Dutta-Bergman, 2004b; 2006; Dutta, 2007) is more comparable to that of Kraft and Goodell (1993) and others who focused on actual health behaviors along with attitudes.

Dimension 3: Health information seeking and usage

There has been inconsistency in the definition of health consciousness in regard to whether or not health information-related actions are a part of the health consciousness concept or factors that can be predicted from one's health consciousness. Some researchers argued that the manner in which an individual uses media or other sources for health information is a major element of health consciousness. For example, Rodgers et al. (2007) suggested individual media use as a health segmentation variable. They contended that including variables regarding media usage along with other traditional audience segmentation criteria (e.g. demographics, health evaluation) increased predictive power of individual health behaviors, and suggested media usage as a basis of effective audience segmentation (Rodgers et al., 2007). With the combination of traditional variables and media usage variables, Rodgers et al. (2007)

identified four audience clusters: Health uninformed, health autonomous, health conscious, and health at risk.

Rodgers et al. (2007) used the term "health conscious cluster" to refer to individuals who are aware of health information and its sources, but who are not necessarily educated about health information or autonomous in information seeking. Therefore, the health conscious group turned out to be moderately engaged in health information seeking and health promoting behaviors, while individuals in the health autonomous cluster were more active in seeking health information from diverse sources, including media channels, and also more active in engaging in health promoting behaviors. Other researchers also demonstrated that health consciousness is related to audiences' attention to or involvement with health messages (Aldoory, 2001; Iversen & Kraft, 2006). Specifically, Iversen and Kraft (2006) argued that high health conscious individuals perceive health messages as being more personally relevant while processing the argument and recommendations in the messages more thoroughly. To Firnham and Forey (1994), health information seeking is an essential element of health consciousness, along with actual food consumption behaviors. Firnham and Forey (1994) defined health consciousness as one's ecological and self-awareness of lifestyles-including health information seeking, food consumption, concern for the natural environment, and perception of prescription drugs. In a similar way, Kaskutas and Greenfield (1997) also viewed health consciousness as being composed of concerns for nutrition and health information seeking.

On the other hand, as discussed earlier, a series of Dutta's studies (Dutta-Bergman, 2004b; 2006; Dutta, 2007) considered health consciousness as an important predictor of individuals' health information-related activities such as health information seeking and learning, and the use of communication channels. Therefore, to Dutta (Dutta-Bergman, 2004b; 2006; Dutta, 2007), such actions are consequences influenced by one's health consciousness, rather than health consciousness itself. Specifically, Dutta-Bergman (2005) showed that health consciousness is a positive predictor of individuals' search for additional health information beyond that provided by a doctor. It was also shown that individuals with high health consciousnesses tend to (1) learn more health information from the media (Dutta, 2007), (2) prefer newspapers, magazines, internet, and interpersonal networks (e.g. family, friends) as primary sources of health information, as opposed to television and radio, which are preferred by less health conscious individuals (Dutta-Bergman, 2004b), and (3) better remember health content and incorporate it in their future behavior (Dutta-Bergman, 2006).

Dimension 4: Personal responsibility

Previous studies have shown that individuals who are health conscious are likely to take responsibility in managing their own health. Kraft and Goodell (1993) suggested that personal health responsibility is one of the four components that constitute health consciousness. Similarly, Dutta-Bergman (2004a) speculated that health conscious persons are more likely to feel responsible for their health, and closely equated a "health conscious" person to a "responsible" person. Because health conscious persons feel more responsibility to take care of their health, they tend not only to engage in preventive and health-maintaining behaviors in their daily lives but also actively participate in online and/or offline health communities (Basu & Dutta, 2008; Dutta-Bergman, 2004a; Dutta & Feng, 2007).

Dimension 5: Health motivation

Motivation is another dimension that has been commonly discussed in previous studies. Defining health motivation as "a goal-directed arousal to engage in preventive health behaviors", Moorman and Matulich (1993) argued that health motivation predicts a person's engagement in preventive health behaviors (i.e. health information acquisition behaviors and health maintenance behaviors). According to Jayanti and Burns (1998), health motivation is a relatively stable psychological trait.

Dutta-Bergman (2004a) also regarded health motivation as a major part of health consciousness, and presented it in relation to the degree to which individuals value healthy conditions. In this regard, Dutta's studies (Dutta, 2007; Dutta-Bergman, 2004b; 2006) used an item stating, "Living life in the best possible health is very important to me", Dutta-Bergman (2004a) defined health consciousness as "an indicator of the consumer's intrinsic motivation to maintain good health" as well as "a reflection of his or her responsibility toward health".

Unlike Dutta-Bergman (2004a), however, Jayanti and Burns (1998) emphasized that health consciousness is distinct from health motivation. According to Jayanti and Burns (1998), "health motivation refers to the internal characteristic of a person, whereas health consciousness refers to the external characteristics of how a person's health is taken care of" Unlike Dutta (Dutta, 2007; Dutta-Bergman, 2004b; 2006), Jayanti and Burns (1998) differentiated health value from health motivation by defining health value as "an individual's assessment of benefits relative to costs in engaging in preventive health care behavior". Therefore, Jayanti and Burns (1998) measured health value by asking how much a specific behavior (e.g. avoiding tension, staying healthy longer, looking younger) is worth the benefit.

In summary, researchers have conceptualized and measured health consciousness differently. This literature review revealed five major dimensions that have comprised the concept of health consciousness: (1) Engagement in health behaviors, (2) psychological attention to one's health, (3) health information seeking and usage, (4) personal responsibility, and (5) health motivation. Therefore, in general, health conscious persons are characterized as actively incorporating healthy behaviors in their daily routines, consistently being attentive to their health conditions, actively seeking and using health information from diverse sources, taking responsibility for their health, and being motivated to stay healthy.

6. Leadership

Leadership development has been investigated through the lens of various theories throughout the 20th and 21st centuries. Indeed, leadership itself has been defined in a multitude of ways. Mumford (1906-1907) defined leadership as "the preeminence of one or a few individuals in a group in the process of control of societal phenomena" (as cited in Komives, Lucas, & Mc. Mahon, 1998). This early definition was aligned with the 20th century industrial school of thought that saw leaders as controllers of events and individuals. Corresponding leadership theories included trait theories, behavioral theories, situational contingency theories, and influence theories (Komives, Lucas, & Mc. Mahon, 1998). Through these theories, "a diverse range of leadership development needs were expressed which included skills such as conflict management, delegation, team building, and parliamentary procedure, and principles such as ethical leadership, group dynamics, and volunteerism" (Daugherty & Williams, 1997).

6.1 Theory related

6.1.1 Trait theory

This theory emerged in the early 1920s, assumed that leaders are endowed with particular characteristics that distinguish them from non-leaders or followers. These included such traits as height, weight, intelligence, self-esteem, and emotional stability (Komives et al., 1998). Trait theorists sought to answer such questions as "what traits distinguish leaders from other people and what is the extent of those differences?" (Bass, 1990). These theorists attempted to develop a list of characteristics that would define successful leaders. Nevertheless, trait theories have proven inadequate in accounting for the many dynamic processes involved in leadership. As explained by Komives et al. (1998), this model neglects situational components in attempting to identify a common set of traits across all leaders. Additionally, many traits associated with leadership are either too obscure to measure or have been inconsistently linked to successful leadership practices. Such failure to link particular traits to effective leadership led to a shift in focus from trait theories to behavioral models; "what a leader does became more interesting than what a leader is" (Komives et al., 1998).

6.1.2 Behavioral theory

Behavioral theory, often referred to as "the one best way to lead" approach (Komives et al., 1998) describe leadership in terms of the actions and behaviors of leaders. Seminal studies on behavioral leadership attempted to differentiate between the behaviors of effective and ineffective leaders. Of particular influence in behavioral research were the Ohio State University studies, in which researchers identified two dimensions of managerial behavior: Consideration and initiating structure (Yukl, 1994). Consideration, the relationship-oriented dimension of behavioral leadership, refers to "the degree to which a leader acts in a friendly and supportive manner, shows concern for subordinates, and looks out for their welfare" (Yukl, 1994). Initiating structure, on the other hand, describes the degree to which attainment of the group's goals shapes the actions and behaviors of the leader. The resulting Managerial Grid Model, developed in 1964, juxtaposed concern for people with concern for production. Research surrounding this model suggested that effective managers and leaders demonstrate a high concern for people as well as production

(Komives et al., 2004). Later studies at the University of Michigan further differentiated between task-oriented behaviors, relationship-oriented behaviors, and participative leadership. Again these studies concluded that effective leaders focus on high performance standards for their subordinates (Komives et al., 1998). Similar to trait theories, however, behavioral leadership models are criticized for their neglect of situational variables. The relevance of particular leadership behaviors has never been found conclusively or consistently to correlate to specific situations, thus leading to the development of situational contingency approaches (Komives et al., 2004b).

6.1.3 Situational contingency theories

Situational contingency theories attempt to account for problems associated with trait and behavioral approaches by focusing on the role of context in shaping the leader's actions. The primary research question is "How do the effects of leadership vary from situation to situation?" (Yukl, 1994). Behavioral and contingency theorists agree that the effectiveness of the leader varies in accordance with the situation; however, behavioral theorists would argue such variance is related to internal factors while contingency theorists suggest external factors are the cause (Komives et al., 1998). According to contingency theories, characteristics of group members and characteristics of the environment shape the emergence and effectiveness of the leader. As noted by Yukl (1994), elements of the situation, particularly task and subordinate characteristics, have a direct impact on the perceived effectiveness of the leader. Such elements influence "others' preferences for a particular pattern of leadership behavior, thereby influencing the impact of the leader on subordinate satisfaction" (Yukl, 1994).

6.1.4 Influence theories

The term Charisma was first used by Max Weber "to describe a form of influence based not on traditional power or formal authority but rather on follower perceptions that the leader is endowed with exceptional qualities" (Yukl, 1994). Charismatic leadership, a term coined by Robert House in 1977, examines the way in which charismatic leaders behave and differ from others as well as the situations in which they are likely to emerge (Komives et al., 1998). The emergence of a charismatic leader is often linked to times of crisis or periods of social upheaval. A word of caution is necessary in the discussion of charismatic leadership; while many charismatic leaders have exerted overwhelmingly positive influences, there is danger in blindly deferring to charismatic leaders whose intentions may not be good. History provides evidence of charismatic leaders whose power and influence were used for evil, resulting in the death of followers and destruction of organizations (Komives et al.).

6.1.5 Post-industrial leadership theories

This postindustrial perspective emphasized a strong, reciprocal relationship between the leader and followers. Rost (1993) posed a new definition of leadership as: "An influence relationship among leaders and followers who intend real changes that reflect their mutual purposes". This definition was updated a few years later to replace the term followers and collaborators, which emphasized a more active than passive role (Rost, 1993). The key components of this definition that highlight the postindustrial perspective are: (1) Leadership as an influence relationship, (2) both leaders and collaborators contribute to leadership, (3) the leaders and collaborators in the relationship are purposeful in that they intend significant or real changes, and (4) the intended changes reflect the mutual purposes of the leader and collaborators (Rost, 1991, 1993).

6.2 Research related to post-industrial leadership theories

Along with changing understandings of leadership, the emergence of the post-industrial paradigm contributed substantially to expanding accessibility of leadership to a variety of populations. Specifically, women benefited from a new conceptualization that incorporated stereotypically "feminine" skills and behaviors consistent with female gender roles (Eagly & Carli, 2003; Helgesen, 1990; Komives, 1994). These skills emphasized relationship-building, process-orientation, connectedness, and ethics of care and concern and transformed leaders into facilitators that perform more like coaches and teachers (Eagly & Carli; Helgesen). Further research established a consistency between women's perceptions of leadership and the values asserted by the post-industrial paradigm (Boatwright & Egidio, 2003; Kezar, 2000). Eagly and Johnson (1990) found women employed a more democratic leadership style grounded in a strong interpersonal approach, whereas men relied more on task-related behaviors. However, these results were diminished in organizational settings and male dominated environments (Eagly & Johnson). More recently, a meta-analysis of 45 studies of transformational, transactional, and laissez-faire leadership styles by Eagly, Johannesen-Schmidt, and van Engen (2003) found that women demonstrated more transformational behaviors (e.g. clearly communicated values, motivation, optimism, willingness to consider new perspectives, and attention to individual needs) than their male counterparts. Women also demonstrated higher levels of contingent reward, or behaviors in which the leader rewards followers for the completion of tasks. Both transformational leadership and contingent reward behaviors have been identified as predictors of effectiveness (Lowe, Kroeck, & Sivasubramaniam, 1996), which would suggest that women may possess a leadership advantage under the post-industrial paradigm (Eagly et al.).

6.3 Social change model of leadership

The Social Change Model (SCM) is one of the prominent postindustrial perspectives of leadership. Since this model was selected as the outcome variables for this, hence; the author will focus in greater depth, next. Higher Education Research Institute (1996), the authors of the SCM, presents some key premises for this model.

6.3.1 The model is inclusive of all people and focuses on not only those people in leadership positions, but also those who are engaged in the process but do not hold formal leadership roles.

6.3.2 The concept of leadership focuses on process rather than position.

6.3.3 The model strongly promotes the values of "equity, social justice, self-knowledge, personal empowerment, collaboration, citizenship, and service".

6.3.4 Activities that serve the common good (service) help develop leadership capacity in a collaborative environment, and learning comes from making meaning out of these and other life experiences.

6.3.5 The model can be used for student affairs professionals, faculty, and academic administrators who engage in facilitating leadership development.

6.3.6 The model serves as one of many possible leadership development models; certain components of the model may be more applicable than others, and it is encouraged that this model change and adapt with time and practice.

6.3.7 The two main goals of the model are (1) to enhance and develop the capacities of self-knowledge and leadership competence in students and (2) to create and "facilitate positive social change at the institution or in the community".

The SCM is comprised of three different levels or perspectives: (1) The individual, (2) the group, and (3) the community/society (Higher Education Research Institute, 1996). The individual level focuses on the leadership participants and the qualities of these individuals. The group level emphasizes collaborative leadership and focuses on developing not only the individual qualities of the participants, but also developing the capacity of creating positive social change. The community/ society level of the model focuses on the intended social change of the collaborative leadership effort and the specific acts of service that energize the group while further developing the personal qualities of the participants (Higher Education Research Institute).

These values are presented below with the level of the model with which is associated.

Individual level: Consciousness of self; Congruence; Commitment

Group level: Collaboration; Common Purpose; Controversy with Civility

Community/Society level: Citizenship.

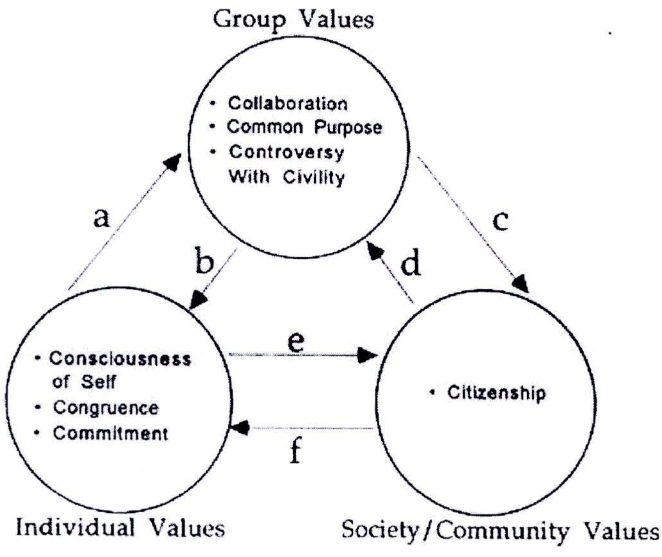

Figure 3 Social change model of leadership

Change is differentiated from the other values because Change is the "ultimate goal of the creative process of leadership" (Higher Education Research Institute, 1996); Change provides meaning and direction for the other seven values, which are referred to as the "7 C's". As signified by the arrows, the values in the model interact with one another and influence one another (Bonous-Hammarth, 2001). The 7 C's and the value of change are presented in more detail below.

6.4 The value of social change model of leadership

6.4.1 Consciousness of self

This value refers to being aware of one's own emotions, attitudes, values, and beliefs that drive the person to take action. This value serves as a foundation of the model, as having self-awareness enables one to realize the other values in the model (Higher Education Research Institute, 1996). Self-awareness is necessary when fully engaging in collaboration with others, finding one's own purpose, and contributing and committing to the group's common purpose. Rogers (1980), a psychologist who focused on a person-centered approach to therapy, writes on the importance of self-awareness. Rogers indicates that a greater sense of self-awareness increases an individual's ability to make more conscious and informed choices and decisions. A person with a strong consciousness of self "is more potentially aware, not only of the stimuli from outside, but of ideas and dreams, and of the ongoing flow of feelings, emotions and psychological reactions that he or she senses from within". Kouzes & Posner (1995) presents the first step in becoming a leader as self-development, or discovering for yourself who you are. Self-development is coupled with self-confidence, or awareness of and belief in yourself. The authors indicate that in the process of self-development, one must examine and clarify his/ her personal values. Identifying one's personal set of values is an important foundation for collaborative leadership. Therefore; leaders must first identify and adhere to a personal set of values before they can encourage others to join them in their pursuits. Burns (1978) emphasizes self-actualization in his book leadership as a characteristic of leaders. Self-actualization involves one's feeling of competence as well as confidence in his/her abilities. Self- awareness is needed to reach the ideal level of self-actualization. Consciousness of Self is the first value in the SCM, and this value is present in additional literature that focuses on psychology, business, and leadership.

6.4.2 Congruence

This value involves being consistently genuine and authentic in one's thinking, feeling, and behavior. Congruence is reflected when one's actions reflect his/her beliefs. The value of Congruence builds off of the value of Consciousness of Self, as it is important for one to be aware of his/her beliefs and convictions before then he/she can demonstrate Congruence. In order to gain credibility, leaders' actions must reflect their beliefs. The authors present this as "say" and "do". Kouzes and Posner (1995) touch on how authenticity, or doing what one says, is important not only as a personal value, but also important when leading others. Congruence, coupled with the first value of Consciousness of Self, leads to the third value in the individual level of the model, Commitment.

6.4.3 Commitment

The third and last value in the individual level of the SCM is Commitment. Commitment is "the purposive investment of time and physical and psychological energy in the leadership development process" (Higher Education Research Institute, 1996). Commitment also involves bringing a group to identify, agree on, and put energy toward a common purpose. The level of commitment involves differing degrees of intensity; more substantial change may require a higher level of commitment than smaller or less substantial change outcomes. Commitment, combined with the other individual values of Consciousness of Self and Congruence, provides a foundation from which decisions and action can be made. The authors (1996) caution that one's individual commitments must be in line with those commitments of the larger group and community and state that responsibility must accompany commitment, which will be further explained in the Citizenship value of the model. Brickman (1987) focuses on commitment in his book, Commitment, Conflict, and Caring. He defines commitment as "whatever it is that makes a person engage or continue in a course of action when difficulties or positive alternatives influence the person to abandon the action". Gardner (1990) writes on the importance of commitment for the individual and the larger community. People build meaning in their lives through commitment; it is important, though, that these commitments go beyond the individual level and also benefit the community. Gardner indicates that commitment does not come easy. It requires hard work, but through this hard work, it brings meaning to life. Leaders have a responsibility not only to find commitment in their own lives, but also to help move others toward commitment (Kouzes & Posner, 1995). Haas (1992) also emphasizes the importance of commitment in leadership. He writes, "commitment is part of the leadership identity that recognizes a higher ideal". Like Gardner, Haas states that meaning in one's life comes from commitments.

6.4.4 Collaboration

The value of Collaboration is the first group value of the SCM. Collaboration is a crucial value to any form of leadership that values the group process of leadership. Collaboration is characterized by relationships, utilizing the strengths of each group member, and recognizing the value of involving the group members in the process of leadership (Higher Education Research Institute, 1996). Collaboration exists when group members work together toward shared goals and when they share "responsibility, authority, and accountability in achieving these goals" (Higher Education Research Institute). Kouzes and Posner (1995) emphasize collaboration in the exemplary practice of enabling others to act. The authors identify fostering collaboration as a crucial component of exemplary leadership. In their research, Kouzes and Posner "didn't encounter a single example of extraordinary achievement that occurred without the active involvement and support of many people". Since this research, the common message they have received has been a unified "You can't do it alone. It's a team effort". Kouzes and Posner continue by stating that collaboration improves performance, which can translate into effective social change. Johnson and Johnson (1994) focus on cooperation and cooperative learning. They present an overview of studies on cooperation and cooperative learning, and present four conditions of cooperative learning:

(1) Perceived positive interdependence, considerable face-to-face interaction.

(2) Clearly understood individual accountability and responsibility in achieving common goals.

(3) Use of interpersonal and small-group skills.

(4) Ongoing group processing of functioning to improve future performance and effectiveness. Through extensive review of 18 studies relating to collaboration, Mattessich, Murray-Close, and Monsey (2001) identified 19 factors

that influence successful collaboration. The definition on which they based their findings was the concept that collaboration is "a mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals. The relationship includes a commitment to mutual relationships and goals; a jointly developed structure and shared authority, and accountability in achieving these goals" (Higher Education Research Institute).

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6.4.5 Common purpose

Common purpose is the second group value of the SCM and is defined as "working with others within a shared set of aims and values" (Higher Education-Research Institute, 1996). When group members share similar purposes and values, it makes it easier for the group to work together to accomplish change. Kouzes and Posner (1995) emphasize common purpose through the exemplary practice of inspiring a shared vision. A vision in this sense is one that is inclusive of the participants in the leadership process; through collaboration, a common purpose can be identified, agreed upon, and acted upon. Kouzes and Posner indicate that through their research, inspiring a shared vision is the least frequently applied practice out of the five exemplary practices of leadership.

6.4.6 Controversy with civility

The third and final group value is Controversy with Civility. This value emphasizes respect for others and being open to others' points of view. An individual or group that practices this value recognizes that differing viewpoints are inevitable and that these differing viewpoints should be aired openly and treated with civility. When controversy arises, individuals and the group should still collaborate and work cooperatively toward "common solutions" (Higher Education Research Institute, 1996) Kouzes and Posner (1995) focus on integrative solutions, or making decisions, recognizing that often there are differing viewpoints and interests. In creating integrative solutions, group members must have a positive perspective of working together, despite the differences, rather than having an either/or mentality. Brett, Goldberg, and Ury (1995) focus on managing conflict at an organizational level. In managing conflicts or disputes, they emphasize the importance of consulting one another and discussing issues that could cause conflict or disputes.

6.4.7 Citizenship

The value of Citizenship is defined in the SCM as "the character of an individual viewed as a member of a society" (Random House Dictionary, 1966, as cited in Higher Education Research Institute, 1996). The word citizen reflects more than just being a community member; citizenship emphasizes civic responsibility, active engagement in the community, and caring for the community welfare and well-being of individuals in that community.

Three outcome measures of attitudinal and behavioral citizenship were identified by Sax (2000) as commitment to social activism, sense of empowerment, and community involvement. Sax's study resulted in some key experiences that contribute to students' citizenship development, which were the amount of time spent in religious services or meetings, performing volunteer work, and socializing with students that have different racial or ethnic backgrounds than themselves. Experiences that discouraged citizenship development included smoking cigarettes, feeling depressed and watching television. An overall conclusion of the study is that involvement in college increases students' citizenship development.

Citizenship and civic leadership emphasize change as desired outcomes of a group's efforts, which is also identified by the SCM as the overall outcome of leadership through the model. Meetings, performing volunteer work, and socializing with students that have different racial or ethnic backgrounds than themselves. Experiences that discouraged citizenship development included smoking cigarettes, feeling depressed, and watching television. An overall conclusion of the study is that involvement in college increases students' citizenship development.

Citizenship and civic leadership emphasize change as desired outcomes of a group's efforts, which is also identified by the SCM as the overall outcome of leadership through the model.

6.4.8 Change

The SCM (Higher Education Research Institute, 1996) highlights Change as the ultimate goal of leadership. Through the individual, group, and community values, positive social change should be accomplished. This change should reflect a better society and world for the broader community, with the individual being part of this community.

Leadership studies tend to focus on the leaders, or the individuals involved in the leadership process, in addition to the outcomes, or measurements of change (Astin H.S. & Leland, 1991) Yukl, Gordon, and Taber (2002) discuss the importance of leading change and propose three behaviors that lead to change: (1) Envisioning change, (2) encouraging innovative thinking, and (3) taking personal risks. Leadership is not only about creating change, it involves purposefully seeking change, creating change that is transformational and fundamental, and making things better, or positive movement (Brungardt et al.). Burns (1978) identifies real change as intended, or purposeful, change. He continues by stating that "real change means the creation of new conditions that will generate their own changes in motivations, new goals, and continuing change".

7. SCM Measurement

Tyree (1998) developed the Socially Responsible Leadership Scale (SRLS), which is an instrument designed to measure the SCM. The 7C's plus change are the eight constructs for measurement of the instrument (Tyree, 2001). The instrument was developed to be used "with individuals, informal groups, or more formal organizations, in both research and practice application, and for a multitude of purposes" (Tyree, 2001).

7.1 Research related to SCM Measurement

The SRLS has been used in multiple research studies (Dugan, 2006a; 2006b; Haber, 2006; Meixner, 2000; Smist, 2006) and has been shown to accurately operationalize the SCM, which gives ample reason for its use in this study. Dugan

(2006b) utilized the SRLS with a brief involvement questionnaire to examine research on leadership and involvement. The study was conducted with undergraduate students in a large western doctoral granting institution. In total, 100 undergraduate classes were randomly selected with 60 classes giving permission to administer the survey amounting in 859 completed instruments out of a possible 912 administered surveys. Institutional demographics of undergraduate students were accurately reflected in the respondents (Dugan). A MANOVA was used for the principal analysis examining the mean differences across the eight SCM constructs based on the status of involvement (Dugan, 2006b). Significant differences in mean scores were revealed using the MANOVA between involved and uninvolved students. Further univariate results indicated different types of involvement were associated with different SCM scores. Among the types of involvement examined in the study, community service was the most influential (Dugan).

Haber's (2006) study on co curricular involvement, formal leadership roles, and leadership education was conducted using data from the Multi Institutional Study of Leadership (MSL). These data were collected from a random sample of 3,410 undergraduates at the University of Maryland (Haber). Results of the study included gender differences as female students scored higher than male students on five of eight SCM leadership outcome measures. Using the I-E-O model of college impact, the variable of involvement in student organizations was the most common environmental variable that was shown to be significant for the leadership outcomes in the study (Haber). A limitation of Haber's study includes the problem of not using a true I-E-O design. This occurred because the data were gathered at one point in time rather than as a longitudinal study surveying students for each part of the I-E-O design at different points in time.

Further studies reflecting the usage of the SRLS as an operationalization of the SCM include Meixner (2000) and Smist (2006). Meixner examined sex differences with the SRLS in undergraduate students' self-perceptions of socially responsible leadership outcomes. Consistent with both of Dugan's (2006a, 2006b) studies, Meixner's found the highest outcome measure to be commitment and the lowest outcome measure to be change. Smist examined the relationship between students' self-perceived citizenship and community service involvement with curricular and cocurricular community service (Smist). Similar to Haber's (2006) study, Smist used MSL data collected at the University of Maryland from 1,205 undergraduate student responders. The key finding of Smist's study indicated that increased undergraduate experiences with community service significantly raised participant scores on the outcome measure of Citizenship (Smist).

Recent research have focused on the leadership outcomes of students through the lens of the social change model. Dugan (2006a, 2006b) examined the relationship of gender and type of co-curricular involvement to students' leadership skills. Using the Socially Responsible Leadership Scale (SRLS), he found that women's scores were significantly higher than men's across six of the eight leadership constructs, suggesting that "women possess an advantage when leadership is defined according to the post-industrial paradigm" (Dugan, 2006). He also found that the type of leadership activity in which students are involved correlates significantly with varied outcomes on the SRLS. Leadership involvement of any kind was found to significantly impact students' scores on the citizenship scale of the SRLS.

Regarding to specific types of leadership involvement, community service activities were found to correlate to significantly higher scores across the largest number of SRLS scales. Thus; it is reasonable to assume that the continued development and enhancement of service learning/community service programs would help attain their leadership development goals. Additionally, the type of institution must be taken into account, as leadership programs at single-sex institutions are likely to produce different outcomes than comparable programs at co-educational institutions.

Table 1 The SCM constructs and their definitions

Construct	Definition
Consciousness of Self	Awareness of the beliefs, attitudes and values that motivate one to take action
Congruence	To think, feel, and behave with authenticity, consistency, and honesty toward others
Commitment	Provision of the energy that motivates individuals to serve and drives the collective effort
Collaboration	Working with others toward a common goal; empowering others through the provision of trust
Common purpose	To work with shared values and beliefs; allows for the collective assessment of issues at hand
Controversy with Civility	Recognition that divergent viewpoints are inevitable the acknowledgment that such differences must be shared openly with civility
Citizenship	Process by which the individual and group become engaged with the community/society through a leadership development activity
Change	To better society and the world both for oneself and for others

8. Volunteerism

There were four key aspects to the literature on the volunteer as "Four W of Volunteering": What (definition), Where (context), Who (characteristics of volunteers) and Why (motivation).

8.1 What (Definition)

It is extremely difficult to define what is meant by a volunteer as there is no standard practice in volunteering (Gaskin K., 1999). Volunteers operate in thousands of different organizations taking on extremely varied roles. Also volunteers cannot be considered to be one large, homogenous group (Wymer W.W., 1998) as volunteers are of all ages and diverse backgrounds with a range of experiences and skills. Most definitions demonstrate that there is an element of exchange in volunteering in which volunteers respond to costs and benefits (Unger L.S., 1991). Although volunteering usually "involves contributions of time without coercion or remuneration" (Smith, 1994) the great variety of situations in which people volunteer invalidates such a simplistic definition. Cnaan et al. (1996) prefer to use a continuum on these points with free choice ranging from "free will" to "obligation to volunteer" and remuneration from "none at all" to "stipend or low pay". They conclude that the perception of what is a volunteer depends on the relative costs and benefits to the volunteer. "The greater the net costs to the volunteer, the purer the volunteering activity and hence the more the person is a real volunteer" (Cnaan R.A., Handy F. and Wadsworth M., 1996).

These definitions suggest that to be regarded as a volunteer one must have some altruistic motive. Such a definition would exclude those involved in what Johnson-Coffey calls "involuntary volunteering" (Johnson Coffey G.C., 1997). This would include those who donate their time under the Government's planned citizenship education or those involved in community service on the "welfare to work" schemes or as part of a Community Service Order. We may also need to make a distinction between those who donate their time to a project for the common good and those who participate as a member of a non-profit organization (Smith D.H., 1993). There are also those who volunteer not so much to provide a service to help individuals and communities to improve the quality of their lives but to campaign to change laws or policies which affect them (Courtney R., 1994). We may wish to differentiate between those who provide help during emergency situations and those who take part in non-emergency helping behavior. This latter group which we think of as volunteers (Clark M.S., 1991). It has also been suggested that volunteers could be classified according to the actual number of hours donated (Yavas U. and Riecken G., 1985).

One could also question whether volunteers, as time donors, should be treated differently from those who donate other items, such as money, gifts in kind, anatomical parts? Yavas U. & Riecken G. (1985) found that time donors shared certain demographic and attitudinal characteristics with those who donated money or anatomical parts. In order to increase the pool of volunteers some firms are allowing employees to have time off work (either paid or unpaid) to undertake voluntary work in the community.

In recent years, the U.K. government has identified and has been active in encouraging business organizations to support the concept of volunteering. Some examples of such initiatives and charities involved in corporate volunteering include Business in the Community (BITC), Project 2001 (a mentoring scheme set up by the RSA), Employees in the Community, VSO business partnership scheme, Nat West Face 2 Face with Finance and City Cares. Two distinct categories of such volunteering are apparent. Employer Supported Volunteering tends to be employee led, usually in the employee's own time, unpaid, encouraged and supported by the employer but not compulsory. Employer Directed Involvement is employer led, in work time with projects chosen to match the organization's needs and used as a personal development tool. Both types of voluntary work are on the increase (Hill N., 1999) with one survey estimating participation in the U.K. by some 15,000 organizations (Hussain S., 1999).

Geroy G.D., Wright P.C. and Jacoby L. (2000) attempt to identify what constitutes corporate volunteering. They point out that employing organizations may be involved in varying degrees. For example, organizations may act only as clearing houses (i.e. by identifying opportunities for employees). BITC see their role as one of three activities: Helping to make the link between community assignments and its organization members, arranging and organizing activities for employees at weekends or after hours or donating money to charities for which employees volunteer ("dollars for doers"). This latter role has also been adopted by Barclays where the bank matches hour for hour the time staff give to the local community (Collinson P., 1999).

8.2 Where (Context)

Participation may take place among those who work full-time or in the leisure time. For those not in full-time, employment volunteering may be an alternative to work or a mean to achieve marketable skills (Johnson Coffey G.C., 1997). Research in this area has either taken place as part of a general discussion on volunteering (Wilson A. and Pimm G., 1996) or has focused on volunteer activity in specific organizations (Cheng C., 1994). Based on a U.S.A. sample of 1,058 volunteers, Wymer uses six key groups when carrying out work on segmenting volunteers:

human service, arts and culture, religion, youth development, education and health (Wymer W.W., 1997).

Organizational structure may also affect the experience a volunteer encounters. Robinson B. (1994) argues that the matrix system may be the most appropriate although Courtney F. (1994) stresses the value of a small, flat, accessible structure. Research and commentary highlight different roles available for volunteers in organizations from operational through to manager and board level (Jacoby L., 2000). The issue of managing volunteers is of prime importance as it is significant in both the recruiting and retaining of volunteers (Wilson and Pimm, 1996; Harris, 1989 and Morris D., 1999).

8.3 Who (Characteristic)

Although the population of volunteers is diverse, Wymer (1997) suggests that homogenous subgroups of volunteers can be segmented for target marketing purposes. The level of educational attainment (determined by the number of years in education) has been considered to be particularly useful (Mc. Pherson J.M. and Rotolo T., 1996). Riecken, Babakus and Yavas (1994) found that those donating time to educational institutions were more likely to be better educated and to have higher incomes than non-donors. This is also the case among young volunteers, Davis and Smith J. (1999) found a marked difference in relation to the school leaving age of young volunteers, with a small minority of their sample (15%) leaving school at 16 or earlier and higher participation rates among the higher socio-economic groups (Davis and Smith J., 1999).

Several studies have found volunteering to be gender specific with more females than males, although political volunteers are more likely to be male (Riecken, Babakus and Yavas, 1994; Rohs F.R., 1986). Age-related variables are also important. Individuals over the age of 50 are more likely to volunteer than younger people (Tschirhart M., 1998). Although, as one would expect, the age of youth leaders is much younger (Rohs F.R., 1986). Marriott Senior Living Services (1991) estimate that more than 40% of adults age 60 and over engage in organizational volunteering. Family background has also been shown to be significant. Shure found that young people were more likely to volunteer if their parents had also volunteered (Shure R.S., 1998). Having participated in the organization as a child or having a child involved were additional factors to consider (Rohs F.R., 1986).

Davis S. (1999) also found differences in employment status among young volunteers. Those working part-time were more likely to be involved than those not working or working full-time. There has been much interest in identifying the socio-demographic characteristics of volunteers as these have been seen as valuable variables in predicting the level of voluntary activity (Yavas U.; Riecken G. and Parameswaran, 1981). Establishing meaningful segments of the volunteer "market" could lead to more effective targeting of particular groups and, thus, more effective recruitment and retention strategies. In effect, creating a recruitment niche.

However, Nichols G. and King L. (1998) point out that the shortage of volunteers may lead to "compromise this definition of their recruitment niche to allow them to recruit more widely". Mc. Pherson J.M. and Rotolo T. (1996) discovered that there was greater heterogeneity in terms of educational attainment amongst groups of volunteers in those organizations facing competition for volunteers. In other words, these organizations were forced to widen the pool from which they drew their volunteers.

8.4 Why (Motivation)

The key to an organization's success in recruiting and retaining its volunteers is to have an understanding of the motives of its target group of volunteers (Chambre S.M., 1987). Many studies have been undertaken to discover why people volunteer and what benefits volunteers gain from helping others. Altruism must be the central motive where the reward is intrinsic to the act of volunteering. The volunteer's motive is a selfless one. There is indeed evidence that altruism exists in many types of voluntary activity (Unger L.S., 1991). Nichols G. and King L. (1999) found the desire to help others was the most frequently cited reason for volunteering in the Guide Association.

Helping others has been found to be an important factor amongst volunteers of all ages; student volunteers (Thippayanuruksakul N., 1989) and those over the age of sixty (Okun M.A., 1994). It is undoubtedly true that many volunteers find the activity to be a rewarding experience but Cnaan and Goldberg-Glen demonstrate that, as well as an altruistic motive, volunteers tend to also act on egoistic motives. People volunteer to satisfy important social and psychological goals (Cnaan R.A. and

Goldberg G.R.S., 1991). Different individuals may be involved in the same activities but have different goals (Clary E., Snyder M. and Stukas A.A., 1991). These goals are so diverse that Mueller uses four main categories to classify the benefits gained. As well as altruism he lists the family unit consuming the collective good (for example, having a child in the unit), the volunteer enjoying a "selective incentive" (for example, prestige, social contact), and the improvement of human capital (Mueller, M. W., 1975).

The idea of volunteering because a family member is benefiting from the organization is supported by studies both in the U.S.A. and the U.K. Smith found that many voluntary organizations in the U.S.A. were providing services not supplied elsewhere so people volunteered in order to maintain the required service (Smith D.H., 1994). Many volunteers in the Guide Association in the U.K. volunteered because they had a child in the unit and volunteered to prevent closure (Nichols G. and King L., 1998). Investigating family volunteering, Johnson-Coffey found that families believed this strengthened the unit, creating "family togetherness".

The "selective incentive" concept is apparent in many studies. A sense of belonging, the need for affiliation, gaining prestige or self-esteem, a way of making friends is evident in a variety of volunteering contexts. Okun found that the strongest correlate of frequency of volunteering among older volunteers was the need to feel useful or productive. Improving human capital appears to be becoming an important motivator for volunteering. Rifkin points out that volunteering provides employment to the unemployed and one-third of the sample in Anderson and Moore's study of volunteers in Canada volunteered in order to occupy spare time. Volunteering is sometimes seen to enable the volunteer to develop skills which may be useful in a future career or help to obtain employment, gain academic credits or even aid career advancement.

Indeed, many of the initiatives in the U.S.A. and the U.K. encouraging the young and the unemployed to volunteer stress that by volunteering one can gain confidence, prepare for the workplace and gain marketable skills. Many volunteers do so as they believe they can contribute positively to the organization as he/she has specific skills which would bring benefits to the organization. Nichols and King found that many guiders had been members when younger and wanted to give something back to the association. Wilson and Pimm (1996) discovered some less obvious reasons why people may volunteer including wanting to wear a uniform, perks obtained, mixing with celebrities, health and fitness, travel opportunities.

The primary motivator for many volunteers is the importance placed on certain values (Okun, M.A. and Eisenberg N., 1992). Snyder and Debono (1987) have termed this the "value-expressive function". Volunteering allows the individual to act on his/her underlying values and be his/her true self. Volunteering may give the individual the opportunity to express these core values and beliefs (Omoto A.M. and Snyder M., 1993) or to pass them on to others (Shor, 1992). For example, religious involvement and religious beliefs have been shown to be associated with a greater likelihood to volunteer (Wymer W.W., 1997). Having looked at the benefits which volunteers may gain, one is still no closer to understanding why some people volunteer when others do not. The process of how people become volunteers is one which requires closer investigation. In his study of volunteers in Oxfam, Bales identifies three stages to be volunteer: The predisposition to volunteer, making the decision to volunteer and finally volunteering (Bales K., 1996). Okun and Eisenberg (1992) suggest that there is a social-adjustive motive. People volunteer because someone they value asks them to. This view is supported by Wymer W.W. (1997) who cites a national study in the U.S.A. by Gallup which reported that "People are more than four times as likely to volunteer when asked than when they are not". He also found that volunteers are more likely to volunteer if they have a friend or family member in the organization.

Riecken, Babakus and Yavas (1994) found that personal contact was important as it reduced the perception of social risk which deterred some from volunteering. The growth in corporate volunteerism was discussed above. Why are a growing number of organizations becoming involved with this?. Geroy G.; Wright P.C. and Jacoby L. (2000) believe "employee volunteer programmers can be seen as positive interventions which have much to offer employees and employers". However, it has been argued that it is not just altruism which is driving this growth but changes in the organizations operating environments, such as cutbacks in funding 81 and downsizing (Johnson G.C., 1997). Another view is that presented by Caudron S. (1994) who suggests that "volunteer efforts are thinly veiled attempts to generate good public relations". Hill N. (1999) feels it gives the organization "an enhanced reputation in the community" or "benefits the company's consumer profile".

Other views state that companies are influenced by ethics and social responsibility. For Caudron S. (1994), it is "a way to address serious social problems" or as Master states corporate volunteering by chartered accountants will "add some real value to the communities in which they live and work" (Master S., 2000). Geroy et al. (2000) believe corporate volunteerism is being driven by "the increased pressure that corporations face to assume responsibility for the community in which they operate".

Benefits are also delivered to organizations in the form of increased profitability (Schweitzer C., 1998), improvements in employee morale and productivity (Caudron S., 1994) and better ideas (Loeb M., 1996). For employees the benefits of being involved in work sponsored volunteering can include developing networks with other organizations, such as the government and the private sector (Caudron S., 1994) and according to Crouter non-work activities " can support, facilitate or enhance work life" (Crouter A., 1984).

Having acquired volunteers the volunteer organization must seek to retain their support. In a dynamic changing environment, where the number of voluntary organizations is growing and the volunteer pool is diminishing, organizations must understand not only what motivates volunteers to join but also what keeps them. Mc. Pherson J.M. and Rotolo T. (1996) found that when competition is intense a group will have difficulty recruiting and retaining members and when competition is low groups will be more likely to recruit and retain members. The very composition of the organization is redefined as members leave and new members are added.

Retention issues are also addressed by Mitchell & Taylor who argue retention is enhanced by positive relations between paid staff & volunteers (Mitchell M.A. and Taylor S.L., 1997) and Wilson & Pimm (1996) explore the dynamics of staff and volunteers. Hobson et al. propose that a volunteer friendly environment would support retention (Hobson C.J.; Rominger A.; Malec K.; Hobson C.L. and Evans K., 1996). In Wright et al. (1995) this friendliness was reiterated in their study of house building in the appalachian mountains, where having fun helped to prevent volunteers leaving. Omoto and Snyder (1995) stress that it is increasing the satisfaction of volunteering which will lead to increasing the length of service. In some instances, the decline in the numbers volunteering often means that the work is left to fewer people and this discourages volunteers from continuing (Gratton C.; Nichols G.; Shibli S. and Taylor P., 1997). Some are deterred from pursuing their involvement in an organization as current volunteers may form a distinctive group which is not particularly welcoming to new recruits (Nichols G. and King L., 1999).

In some instances commitment levels may be low, perhaps just a few hours a week. Here leaving will cause little or no disruption to lives or reputation (Pearce J.L., 1993). The issue of time available to volunteer is highlighted by Nichols and King (Nichols G. and King L., 1998) and Davis Smith (1998) who demonstrate that people want to volunteer but conflict sometimes develops between volunteering and paid work and also family commitments. Individuals have finite resources to devote to organizations (Mc. Pherson J.M. and Rotolo T., 1996). Yavas and Riecken (1997), focus on the busy hedonistic lifestyles people pursued in the 1990s. The affect of the age of children on parents ability to volunteer has been recognized from early research in the 1960s (Babchuk N. and Booth A., 1969) and seems as relevant today (Nichols G. and King L., 1998). Several studies show that parent volunteers resign when their childs involvement in the organization ends (Nichols G. and King L., 1998).

Motivation issues explored earlier may also affect retention of volunteers, for example Rubin and Thorelli state if your volunteer joins for egotistic reasons then their length of tenure is likely to be small (Rubin A. and Thorelli I.M., 1984). Recruiting can raise unrealistically high expectations (Pearce J.L., 1993). The expectations and perceptions of new recruits may differ from reality. Having a friend or family member involved in the organization may give more realistic expectations to potential recruits. Furthermore, it has been shown that the image of volunteering often deters younger people from donating their time (Nichols G. and King L., 1998).

To retain volunteers the organization must offer something particular for its own members (Pearce J.L., 1993). Okun and Eisenberg (1992) suggest that for elderly volunteers this differentiating factor could be either connected to the need for visibility and status or satisfied by the rotation of activities. This emphasis on activities as a means of satisfaction and commitment is highlighted in the work of

Dailey who shows that, for political campaign workers, commitment was linked to the job characteristics, such as feedback, involvement and autonomy (Dailey R.C., 1986). This element of recognition is also raised by Gidron (1983). Brown and Zahrly (1989) suggest that some volunteers require activities to improve skills as against generalist activities. This is interesting in the light of the ongoing discussion on the potential of N.V.Q.'s as a motivator and retention tool, although in a sample of 21 non-governmental organizations Amos-Wilson found that only 6 organizations provided training for their volunteers and this tended to be driven by organizational requirements rather than individual need (Amos W.P., 1996).