

ENHANCEMENT OF ADOLESCENT WELL BEING
THROUGH ENHANCEMENT OF SELF ESTEEM,
SELF EFFICACY, AND POSITIVE
ATTRIBUTIONAL STYLE

CENTRE FOR NEWFOUNDLAND STUDIES

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**Enhancement of Adolescent Well Being Through Enhancement of
Self Esteem, Self Efficacy, and Positive Attributional Style**

by

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Abstract

This paper addresses the issue of enhancing three aspects of the adolescent self: self esteem, efficacy, and attributional style. The relationship between these three variables and their link to well being and some common adolescent problems are discussed. Self esteem, self efficacy, and attributional style are discussed in detail, including definitions of the concepts, theory development, and influences on each variable's development. Self esteem, self efficacy, and attributional style's effects on adolescents' cognitions, emotions, and behaviours are also discussed. Characteristic self esteem, self efficacy, and attributional style changes in adolescence, gender differences, and intervention strategies are also outlined. This paper is intended for people dealing with adolescents (e.g., parents, teachers, others) and highlights the importance of, and methods to enhance, self esteem, self efficacy, and attributional style in the adolescents' self. Enhancement of these aspects of the self will have a positive affect on adolescent well being.

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Introduction

Parents are concerned first and foremost with their children's well being, and with being there to encourage them to achieve their potential. Teachers, educational psychologists, and other members of the education system become 'in loco parentis' to children in school. The education system's staff are responsible for guiding their students' achievement of required educational objectives, as well as developing students' potential and enhancing their well being. This is evident in the Newfoundland education system, with increasing numbers of schools signing on to a more holistic approach to education via the Department of Education's "School Development" process. School staffs are increasingly committing themselves to developing intellectual, emotional, social, and spiritual well being within the school community. This presents a problem for many educators who may be unclear as to how to develop students' well being. Furthermore, increasing workloads for educational psychologists and guidance counsellors (the usual educational designates of such tasks) increases the urgency for other educators to learn how to promote students' well being.

The intensity of threats to one's sense of self and well being may vary according to one's age group. Due to rapid physical, cognitive, affective, and social development during adolescence (Jacobs & Ganzel, 1993) and fluctuations in certain aspects of self (Breakwell, 1992; Nicholls, 1990; Rosenberg, 1979), adolescents may be more susceptible to lower or fluctuating states of well being. Adolescence is an important

period of life, as problems forming here may be detrimental to the developing adult self. This developing sense of self does not form in a vacuum; significant others (e.g., parents, teachers, other adolescents) play a major role in facilitating the development of the adolescents' positive sense of self and well being.

What is Adolescence?

A. Origin of Western / American adolescence

Adolescence is a relatively new concept, and involves a transition of self (Baumeister & Tice, 1986). These authors explained that the history of adolescence and social culture influenced adolescent development. The end of the nineteenth century brought about a shift on the locus and burden of self definition (Baumeister & Tice, 1986; Harter, 1990). Adolescents moved from predetermination of the adolescent's 'adult identity' by family, community, and shared cultural values, to a process of self definition; choosing and constructing his/her own adult identity from multiple options (Baumeister & Tice, 1986; Harter, 1990). Baumeister and Tice (1986) noted four major characteristic changes in American adolescents. These included changes in cultural conceptions of adolescence, social and economic status, adolescent task/ occupation, and the developmental process associated with adolescence. Up to the end of the nineteenth century, adolescence was a brief period in life, in which one was economically independent, and assumed the identity, values, careers, and even the spouse chosen by his/her parents. The new Victorian concept of adolescence shifted from the adolescent who was ready to assume

adult roles (e.g., an adult size portion of farm tasks) to the concept of adolescence as an awkward phase of life, and a period when one was prone to conformity, being anti-intellectual, passive, in need of much supervision, and vulnerable (Kett, 1977).

Adolescent socioeconomic status also changed; adolescents were viewed as wholly dependent on their parents, uncommitted to adult roles, given few or no responsibilities (other than schoolwork), and had "multiple options for adult identity" (Baumeister & Tice, 1986, p. 188). Adolescents' occupational roles shifted from accepting the adult role chosen for them by their parents (e.g., prepared for a career in the 'trades', military, or clergy), to the attainment of "a nonspecific liberal arts education that is presumed to be a prerequisite for all sorts of jobs, even housewifery" (Baumeister & Tice, 1986, p. 189).

Thus, adolescents had an increased role in creating their own adult identity.

Developmental processes such as adolescent personality and character development were also different: previously, adolescent developmental tasks included acceptance of his/her parents' moral and religious convictions. Today, adolescents' values are determined by oneself, with the major developmental task being identity formation (or undergoing an identity crisis - Erikson, 1968). Western society's advances in social and economic life (e.g., public education and strict labour laws) also changed adolescence by extending this period between childhood and adulthood. The adolescents' new developmental task was to construct an adult identity through self choice of occupation, but the loss of consensus regarding political, religious, and moral 'truths' in Western society created a "moratorium status for the teenager" (Baumeister & Tice, 1986, p. 197). Harter (1990) noted that in

this adolescent moratorium, society increased adolescents' identity options, yet deprived them of the basis to make these decisions. These findings make it clear that the adolescent self has changed over time.

B. Modern day adolescence

Adolescence is a period of growth between childhood and adulthood, from age 12 to 19 years of age (Gemelli, 1996). A review of the literature noted various markers that signalled the transition from childhood to adolescence. These included puberty (Kissiar & Hagedorn, 1979), one's age (e.g., 13), the emergence of new cognitive and psychological characteristics (e.g., formal operational thought, differentiated self concept, concern for one's identity), social experiences, and life events (e.g., finishing elementary school, working, dating, driving) (Montemayer, Adams, & Gullotta, 1990). Harter (1990) noted that no clear markers signalled the end, or even beginning, of adolescence. Adolescence is a time "characterized by rapid, physical, cognitive, affective, and social development" (Jacobs & Ganzel, 1993, p. 7). It is accompanied by changes to the adolescents' physical and psychological make up as they experience fluctuations in their thoughts and feelings about themselves, and instability within the self (Harter, 1990). Adolescence has also been cited as a critical period of development that placed "heavy demands on simultaneously managing stressful biological, educational, and social changes" (Bandura, 1997, p. 160). Research has noted that major biological changes characterized early adolescence, and "significant changes in social roles" occurred in late adolescence (Dusek & Flaherty,

1981, p. 9). Jacobs and Ganzel (1993) noted that adolescence was a time when adolescents began to make more decisions and cope with others' often conflicting demands (e.g., parents, school, jobs, peers). Adolescents were also plagued with new concerns about themselves, such as their personal appearance and plans for the future (Westera & Bennett, 1990). Brown (1993, p. 53) stated "beliefs that one is attractive and popular are critical during adolescence". Breakwell (1992) observed that adolescents experienced heightened psychological estrangement and self efficacy changes during adolescence, as they moved from childrens' to adults' expectations. Thus, adolescence is a period that involves some role ambiguity and frustration as the adolescent is not a child, nor does he/she have the status and responsibilities of adulthood bestowed upon him/her. Due to their ambiguous status, people may treat an adolescent as a child, adult, or some other uncertain status (Harter, 1990).

Adolescence has been cited as a time to explore one's values (Westera & Bennett, 1990, p. 27), and reorganize one's personality (Wexler, 1991). Harter (1990) noted that in addition to changes in the self, there were changes in one's interest in the self, as the self became the object of constant observation and evaluation. Adolescence has also been noted as a difficult period characterized by adjustment problems and problematic behaviours (Benson et al., 1994), motivational declines (Stipek & MacIver, 1989), and an intense, labile range of heightened narcissism and self preoccupation caused by emotional confusion (Wexler, 1991). This preoccupation with the self is partly sparked

by the adolescent's development of new cognitive abilities (Pope, McHayle, & Craighead, 1988). Elkind (1978) discussed two types of adolescent egocentrism - imaginary audience and personal fable. This author likened adolescents' preoccupation to a performance in front of an imaginary audience, and added adolescents held beliefs that their thoughts, feelings, motives and experiences cannot be understood or experienced by others (a personal fable).

The problems and concerns of modern day adolescents

While adolescence is a developmental period that is problematic, it may not be a time of 'storm and stress'. Most adolescents navigate this transitional period without excessive disturbance or discord (Bandura, 1997; Dusek & Flaherty, 1981). Dusek and Flaherty (1981) encouraged an alternate view of adolescence: adolescence contained periods of instability within a context of constant change, much of which could be accountable by socio-cultural factors. Yet, this description should not trivialize adolescents' struggles and frustrations experienced at various times throughout adolescence. Few adults would welcome the option of going through adolescence again with only the skills and knowledge they possessed at that time. Lowenthal, Thurner, and Chiriboga (1975) found that people in various stages of life popularly regarded adolescence as the worst age of their lives. Statements that adolescence is not a time of extreme stress does not alleviate adolescents' problems, nor aid in their adjustment to changes in appearance, identity, thoughts, mood, behaviour, self preoccupation, and heightened concern for others' opinion of him/herself.

Adolescents possess limited experiences to facilitate their adjustment, thus, these changes can become the most dire of emergencies.

Western culture's extended period of adolescence created new adolescent problems.

Baumeister and Tice (1986) noted that some adolescents retained their transitional adolescent identity for prolonged periods, instead of forming an adult identity. Societal changes made adult identity formation more difficult for adolescents as they must "define an identity within a given context, yet also choose and create this context" (Baumeister & Tice, 1986, p. 197). These authors noted that changing family conditions contributed to adolescent problems such as emotional turmoil (caused by increased family contact). Parents' experiences with adolescents also changed, as adolescents were increasingly dependent, and parents had less control over their adolescent's identity formation.

Other adolescent problems arose from Western culture's new concept of adolescence.

Rosenberg (1985) noted that self criticism and other negative self feelings were most severe in adolescence. Bandura (1997) noted that adolescents with self doubts (e.g., concerning their intellectual or social skills) and lacking supportive guidance were more prone to depression. Depression has been noted in 20-25% (mild depression) and 5% (severe depression) of adolescents (Gans, 1990). Sexually transmitted diseases seem more prevalent in modern day adolescents; one out of four adolescents contract a sexually transmitted disease before graduating high school (Gans, 1990). Teenage pregnancy

statistics show that one out of three young women was pregnant before age 20 (Meece, 1997). Suicide also ranked high in adolescence. Suicide has been noted as the second leading cause of death in young people (a close second to homicide), and accounted for 11% of deaths in the 15-19 age group (Garland & Zigler, 1993). Project Teen Newfoundland, a 1990 survey of 2649 Newfoundland teenagers aged 15 - 19, discovered many regional adolescent concerns. These concerns, in respective descending order of importance, included uncertainty of post secondary options (e.g., work, further studies), constant lack of time, boredom, school, feeling stressed, financial concerns, personal appearance, feelings of not being "as good as" others, depression, guilt, concern for parents' marriage, loneliness, and sexuality (Westera & Bennett, 1990).

Factors contributing to adolescent well being - Self esteem, self efficacy, and attributional style

Good mental health and a positive state of well being are touted as positive states of self in this culture. Synder and Higgins (1986) reported that mentally healthy individuals were characterised by "unrealistically positive views of themselves, exaggerated beliefs of their personal control and unrealistic optimism about their futures" (Synder & Higgins, 1986, p. 104). A related concept is emotional well being, which has been defined as "one's ability to relate to other people, feel comfortable with the self, cope with disappointments and stress, solve problems, celebrate successes, and make decisions" (Page & Page, 1993, p. 5). The following papers consider three psychological variables

related to adolescents' positive concepts of self, mental health, and well being; self esteem, self efficacy, and one's attributional style. Self esteem is regarded as an important dimension of self concept (Rosenberg, 1986) and refers to one's perception of his/her worth (Battle, 1987). Research has shown that self esteem is the foundation of an adolescent's well being (Battle, 1987; Branden, 1988; Deci & Ryan, 1995; Page & Page, 1993). Another variable related to self concept is *self efficacy*, which involves people's judgements of their ability to perform a specific task given the skills they possess and the circumstances they face (Bandura, 1986). Self efficacy beliefs contribute to one's physical, psychological, and psychosocial well being (Bandura, 1986, 1997; Nicholls, 1990; O'Leary, 1992), and healthy development throughout the lifespan (Phillips & Zimmerman, 1990). A third variable is one's attributional style, or one's interpretation of successful or failed outcomes and causes to these outcomes (Weiner, 1986). Positive attributional style is associated with a positive self image (Layden, 1982; Synder & Higgins, 1986), and enhanced feelings of control over one's environment (Wortman, 1976). Having control over the environment has been associated with well being (APA Task Force on Health Research, 1976; Bandura, 1986, 1997; Nicholls, 1990). Thus, positive attributional style promotes positive well being, whereas a negative attributional style exacerbates dysfunctional behaviour (Storms & McCaul, 1976). Self esteem, self efficacy, and attributional style have associated negative and positive cognitions, emotions, and behaviours. These variables' negative cognitions, emotions, and behaviours are evident in common adolescent problems and concerns (e.g., feeling

inferior to others, lack of personal control, concern with academics, lack of motivation, depression, stress, sexual behaviour, etc.). Positive levels of self esteem, self efficacy, and attributional style can be maintained and developed in adolescents, which promote a more positive adolescent sense of self and well being.

The following three papers highlight the importance of self esteem, self efficacy, and attributional style to adolescent well being, and are intended for people dealing with adolescents (e.g., parents, teachers, even the adolescent). These aspects of self will be defined in more detail, including theory development, and influences on their development. The importance of self esteem, self efficacy, and attributional style in adolescence, and associated positive and negative effects on adolescent cognitions, emotions, and behaviours are noted. The developmental patterns of these three variables throughout adolescence (including gender differences) are also noted. Finally, intervention strategies for enhancing each variable, which in turn positively affect adolescent well being, are explained.

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Abstract

This paper stresses the importance of self esteem as an aspect of the adolescent self. First, self esteem is defined, and a brief background on self esteem theory is reviewed. Then, self esteem's association with adolescent well being, common adolescent problems, and its importance in adolescence is highlighted, including the implications of low and high self esteem. Characteristic self esteem changes and the rationale for these self esteem shifts in adolescence are also outlined. Finally, characteristic gender differences in self esteem and adolescent self esteem interventions are discussed. This account of adolescent self esteem will provide the educator (and others dealing with adolescents) with information on the effects and changes in self esteem, for the purpose of using the information to foster higher levels of adolescent self esteem and well being.

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What is self esteem?

When adolescents voice concerns that their feelings are not understood, investigating their self esteem may provide some insight. Self esteem is a construct that has a plethora of research, and a variety of definitions. Coopersmith (1967) defined self esteem as self evaluations made and maintained which expressed self approval and indicated one's beliefs of capability, significance, successfulness, and worthiness. Branden (1969, p. 110) stated that self esteem was a view of one's self that entailed "a sense of personal efficacy and a sense of personal worth". Battle (1981) described self esteem as the individual's perception of his/her own self worth. Other researchers have noted that self esteem refers to positive or negative evaluations of information (Newton, 1995; Pope, McHayle, & Craighead, 1988) or of feelings (Brown, 1993) about the self. Rosenberg (1986) noted that self esteem generally involved feelings of self acceptance, self liking, self respect, and feelings of self worth. Self esteem has also been cited as "... central in a broad network of constructs associated with motivation, performance, and well being ... and has often been found to relate to more effective behaviour and better adjustment than has low self regard" (Deci & Ryan, 1995, p. 31). Simply stated, (global) self esteem is the general regard one holds for the self as a person (Harter, 1990).

Self esteem has been regarded by some as "the most important single aspect of self concept" (Rosenberg, 1979, p. 13). Unfortunately, much research on self esteem fails to distinguish it from self concept. Self concept has been broadly defined as the person's

total perceptions of him/herself (Coopersmith, 1967; Shavelson & Bolus, 1982), whereas self esteem is a more narrow concept dealing with perceptions and feelings of one's worth (Battle, 1987; Brown, 1993). There are many references in the literature (e.g., Marsh, 1993) to self esteem as general self concept, which opposes Rosenberg's (1979) delineation of self esteem as a *component* of self concept.

Battle's (1987) review of self esteem literature unearthed many generalizations about self esteem. First, self esteem is not one 'thing', or uni-dimensional, but consists of many related facets, thus, is multidimensional. Second, self esteem is a subjective evaluative phenomenon. This means that people have a subjective disposition to make judgements about their self worth, which changes over time to include evaluation of their own performance in relation to others. Third, once established, self esteem "tends to be fairly resistant to change", although change can occur in any developmental period (Battle, 1987, p. 24). Battle (1987) contended that intervention was required to achieve a significant change in self esteem. Thus, people with low self esteem would need some sort of intervention to enhance their self esteem. Battle also noted that self esteem was stable by nature and gradual in its development, although some disturbance occurred in adolescence. Hodges and Wolf (1997) explained that self esteem had a cyclical nature, in that self esteem espoused certain thought processes/ cognitions, emotions and behaviours that perpetuated levels of self esteem.

Harter (1986) outlined two major contributors to self esteem theory: James' (1890) cognitive -analytical theory of competency-importance discrepancy, and Cooley's (1902) 'looking glass self' theory. James outlined that people's self worth/ esteem derived from cognitive appraisals of their competencies in various domains, and the importance of success within these domains. The larger the discrepancy between competency (high or low) and importance (very or not very), the lower the judgement of their own worth. Discrepancies closer to zero indicated that one's hierarchy of perceived competencies was congruent with one's hierarchy of judgements concerning the importance of success, thus was associated with high self esteem. Cooley described the self as ideas or a system of ideas formed through communication with others, and referred to the self as a social construct. His looking glass self theory explained that one's self perceptions and self feelings were determined by his/her beliefs of what other people thought of him/her. These self perceptions and feelings formed according to three principal elements: one's perception of the self's appearance to others, one's beliefs in how others perceived his/her appearance, and feelings resulting from this self perception. Cooley (1902, p. 184) stated that, "the thing that moves us to pride or shame is not the mere reflection of ourselves, but . . . imagined effect of this reflection upon the other's mind". He provided examples such as one's shame in appearing evasive in front straightforward people, cowardly in the presence of a brave people, and gross in the eyes of the refined person. Cooley noted that one's social self feeling (the social self) would be high if the image reflected to the self was favourable (high social support), and low if the image reflected was unfavourable

(low social support).

Harter (1986, p. 167) also noted that “the origins of our sense of self lie in our perceptions of what significant others think about us”. The more one perceived significant others as having regard for them, the higher the individual’s self worth (Harter, 1990). She explained that each of these sources of self worth (James’ and Cooley’s formulations) were strongly correlated with one’s general self worth, though independent of each other. Harter (1990) added that both high social support and low discrepancies were needed for positive self worth, as problems and negative effects in one area (social support or discrepancies) could not be compensated by the other area and lowered self worth. She further explained that to enhance a child’s sense of worth, there should be an emphasis on competency - importance constructs and emotional support by significant others in the child’s social environment.

A definition of self esteem can be summarized from this research. Essentially, self esteem is an aspect of self that is a multidimensional, relatively stable perception and feeling of one’s worth, derived largely from our own and other’s views of our competencies. It is worthy to note that self esteem’s gradual development is disturbed during adolescence.

Why is self esteem important in adolescence?

1. Self esteem as a contributing factor to adolescent well being

Self esteem's importance has been well documented in the literature. Research has shown that it is "a function of a very wide array of variables" in human behaviour (Wylie, 1989, p. 2), has an affect on individuals' day-to-day happiness (Harter, 1990), affects one's functioning at various stages of the lifespan (Harter, 1990), and is the most constant feature of an individual's experience (Rosenberg, 1986). Kissiar and Hagedorn (1979, p. 129) highlighted the importance of adolescent self esteem's strong influence on using one's potential, as self esteem affected all aspects of one's life, and constituted "the essence of [one's] personality".

Torres, Fernandez and Maceira (1995, p. 404) stated that self esteem "is considered to be one of the [personal] variables with the greatest potential for inhibitory or promotional influence on health behaviour". The influence of positive self esteem is critical during adolescence, as many personal qualities acquired at this time affect the formation of "favourable health behaviour" (Torres et al., p. 410). Torres et al. found that adolescents' general health (operationalized as mental health, personal health, social aspects of health, nutrition and safety) was significantly correlated to self esteem and the value adolescents placed on health. Earlier studies by Abood & Conway (1992) noted that when the effect of health value was controlled, self esteem still predicted general wellness behaviours. Zimmerman, Copeland, Shope, and Dielman (1997) also noted that adolescents with

consistently high, or moderately high and rising, self esteem reported developmentally healthier behaviours and beliefs such as less susceptibility to peer pressure, higher school grades, less alcohol use and misuse, and less approval/tolerance of deviant behaviours. Other research has noted that an adolescent's perceptions of physical health are linked to his/her emotional well being, and are shaped by "the youth's overall sense of functioning as measured by the quality of their family relationships, school achievement and self esteem" (Vingilis, Wade, & Adlaf, 1998, p. 95). Self esteem is also known to affect one's achievement patterns, relationships with others, ability to adjust to environmental demands, motivation, performance, effective behaviour, and one's general state of well being (Battle, 1987; Deci & Ryan, 1995; Mruk, 1995; Wilson & Petruska, 1982).

Research has found a connection between physical health and self esteem. Benzer, Adams, and Steinhardt (1997) found positive self esteem in late adolescents and adults was related to lower body dissatisfaction and eating restraint, and higher self reports of wellness. Adolescents' self esteem was also positively related to beliefs that one could fight illness, prevent sickness and accidents, make healthy choices in one's life (Dielman, Shope, Butchart, Campanellie, & Caspar, 1989). Dielman et al. further noted that self esteem's relationship to an internal health locus of control was important, as an internal health locus of control predicted positive health related behaviours. Giblin, Poland, and Sachs (1986, 1987) also found a connection between self esteem and health behaviour. These researchers found that pregnant adolescents with low self esteem had an increased

tendency to miss post partum visits, whereas those with high self esteem attended these visits. This connection between self esteem and health behaviour was further supported by Tennant (1993), who found adolescents with high self esteem and social support were more likely to engage in health promoting behaviours.

Research has also shown that self esteem is associated with one's mental health and psychological well being (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995). Harter (1990a, p. 231) noted that a positive sense of self esteem was "central in the promotion and maintenance of psychological health and successful adaptation". This relationship between self esteem and mental health is important, as lower levels of mental health lead to increased psychopathology (e.g., lower ratings of general health, less life satisfaction, cognitions of not having a purpose in life, feeling hopeless) (Shek, 1998). Baker (1986) also noted self esteem's importance in adolescence, as positive and negative self esteem predicted positive and negative perceptions of personal health, respectively.

Self esteem also appears to be related to personal safety and safety related behaviours. Smith and Heckert (1998) found a negative relationship between late adolescents' self esteem and traffic accidents and citations, such that low self esteem was related to high incidence of traffic accidents/citations. Geller, Roberts, and Gilmore (1996) found that people's willingness to ensure that their work environment was safe for others was positively associated with high self esteem. Other research has noted a negative

relationship between adolescents' self esteem and participation in risky, health endangering behaviour, such as taking social risks (e.g., dropping out or being suspended from school, riding with a drunk driver, sexual activity, running away, being arrested) and substance use (e.g., alcohol, tobacco, marijuana) (Rouse, Ingersoll, & Orr, 1998). These researchers divided adolescents into three groups, depending on participation and ability to cope with, risky, health endangering behaviours. These groupings included adolescents who rarely participated in risky, health endangering behaviour (referred to as normal adolescents), and two groups who more frequently participated in such behaviours; those who seemed more able to cope with these behaviours (resilient adolescents), and those less able to cope (non-resilient adolescents). Rouse et al. found decreasing levels of self esteem and increasing levels of risky behaviours in normal, resilient, and non resilient adolescents (respectively).

Self esteem is associated with adolescents' nutrition and dietary habits. Pesa (1998) found that females' self esteem was the strongest psychosocial factor affecting weight loss in normal weight adolescents, and a less though still significant factor affecting weight loss in underweight adolescents. Other research has noted self esteem's relationship to weight loss in obese adolescents who became non-obese (O'Brien, Smith, Bush, & Peleg, 1990). Research has indicated a bidirectional nutrition - self esteem relationship, as healthy nutrition coupled with exercise weight training increased college students' self esteem, which caused a reduction in depression (Pendola, 1996). Other

studies have found programs designed to increase self esteem and knowledge of healthy behaviours increased healthy lifestyles in late adolescents (Megel, Wade, Hawkins, & Norton, 1994). Thus, it appears that self esteem has an effect, and can be effected by, healthy nutritional behaviour.

Many common problems experienced by adolescents are associated with self esteem. Adolescents' self esteem has been linked to peer conformity and personal appearance satisfaction (Kissiar & Hagedorn, 1979), perception of ability to achieve in school (Brookover & Thomas, 1964) social acceptance (Harter, 1990), motivation (Battle, 1987; Rosenberg, 1979), depression (Battle, 1978, 1980; 1987a), academic performance (Battle, 1991), and anxiety (Battle, 1988). Self esteem has also been associated with earlier initial sexual behaviour, suicide, and drug and alcohol use/ abuse (Irwin & Schafer, 1992; Skager & Kerst, 1989; Uribe & Ostrov, 1989, respectively). As well, self esteem has been linked with concern with one's competencies and deficiencies (Rosenberg, 1986). These studies indicate that high levels of self esteem are associated with more positive levels of these variables (e.g., higher motivation, lower depression). Consequently, the development of positive self esteem may help enhance healthy outcomes or protect adolescents from engaging in problematic behaviours (Zimmerman et al, 1997).

James' (1890) competency - importance discrepancy, and Cooley's (1902) looking glass

self are models of self concept that strongly contribute to one's self esteem. Harter (1990) showed that these two models were causal in adolescent self worth formation. Using James' competency-importance discrepancy model (the level of competence/adequacy in relation to the importance - judgement discrepancy), Harter (1990) found that some domains contributed more than others to the prediction of childhood and adolescent self worth. She noted that the most important domains contributing to the adolescent self were physical appearance and social acceptance (respectively), with a lesser (though still significant) degree of importance held on scholastic competence, athletic competence, and behavioural conduct. Cooley (1902, p. 200) described adolescence as "a season of passionate self-feeling", at which time social self-feelings can become very intense and especially susceptible to others' reflections of the self. Harter (1990, p. 75) stated that Cooley's looking glass self model was highly relevant to adolescents, for within this model, "significant others are the social mirror into which one gazes for information that defines the self". Harter went on to show that adolescents incorporate the attitudes of significant others toward them, and noted the impact of particular sources of support: parent and classmate support contributed most to adolescent self worth, with less impact being exerted by the support of close friends and teachers (respectively). Classmate support was "at least as strong as [parent support] in early adolescence, ages thirteen to fifteen", and seemed similar for children (Harter, 1990, p. 83). Further, she noted that the acknowledgement of peers in the public domain (classroom) affected adolescent self worth more than personal regard from a close friend, perhaps because the friend was

perceived as a less objective source of feedback with which to validate the self. Weiner (1984) also described the importance of social comparison within the classroom. He explained that self worth and personal esteem were, in part, determined by success and failure with exams and social comparison with classmates. Thus, characteristics of adolescence, such as of self criticism, seeking peer acceptance, and hyper sensitivity to others' opinions can negatively affect adolescent self esteem.

Research has shown that academic and work related achievement were major sources of self esteem (Anderson & Hayes, 1996). Self esteem was also significantly associated with students' ability perceptions to perform academic tasks, as well as poor academic performance (Battle, 1991; Downs & Rose, 1991). Thus, self esteem's association with positive performance, and academic performance's link with future career opportunities, make self esteem a very relevant issue for adolescents.

Rosenberg (1979, p. 53 -56) noted that self esteem was both an aspect of the motivational system and a motive. He noted that the self esteem motive was a "wish to think well of ourselves", had "powerful emotional and behavioural consequences", was "actively sought", and was "one of the most powerful [motives] in the human repertoire". Harter (1986) also noted that self esteem was an aspect of motivation, and proposed that self worth / esteem mediated the strength of our feelings (how happy and sad we are), which in turn influenced our available amounts of energy and interest. Harter (1986, 1990)

found that global self esteem/worth had a major impact on one's mood or affective states, and a lesser direct effect on motivation. She proposed that self worth influenced motivation *indirectly*, as its effect was "primarily mediated through affect" (Harter, 1986, p. 173). Self worth appeared to be strongly associated with one's affect: children who liked themselves described themselves as happy, and those that did not like themselves were more apt to feel sad and depressed. She further explained that affect, in turn, had a powerful influence on one's general motivation. Harter (1990a) noted that the happy adolescent has greater energy levels and may be highly motivated to do activities, whereas the sad or depressed adolescent has little energy or desire to engage in activities. Consequently, self esteem serves a functional role, as it influences one's affect and subsequent motivation (Harter, 1990a).

Kissiar and Hagedorn (1979, p. xi) explained that an adolescent's self evaluation was "the single most important factor in determining his response to peer group pressure". These authors noted that adolescents' response to peer group pressure was related to developmental changes. The transition from childhood to adulthood coincided with feelings of being socially, emotionally and intellectually inept, wherein one looked to others for information with which to help him/her form his/her own self concept. Peers also influence the adolescent's self concept, as adolescents generally spend less time with their family and more with their peers (Kissiar & Hagedorn, 1979). Harter (1990a, p. 226) noted that an adolescent's perceptions of significant others' attitudes toward

him/herself “profoundly impact their self esteem”, with high/low self esteem caused by perceived positive/ negative regard of significant others (e.g., parents and peers), respectively. Adolescents’ peer group can also function as a retreat from the world of adults, within which there are strong attachments, solidarity, communication and love; yet pressure, censure and ostracism also exist (Kissiar & Hagedorn, 1979). These authors noted that adolescents with inadequate self esteem followed the crowd and were easily swayed by their peer’s conduct, demands, and challenges, in their search for acceptance and security. Kissiar and Hagedorn went on to propose that the solution to adolescents being swayed by peer group pressure and manipulation is enhanced healthy self esteem. This healthy self esteem contributed to a state of being more “immune to harassment, manipulation, or enticement by peers” (p. 4).

These research studies have outlined the importance of self esteem to adolescents’ well being, as well as its role in common adolescent problems and concerns. Self esteems’ role can be summarized as follows: High self esteem is a positive contributing factor to adolescent well being, and low self esteem is a negative contributing factor to adolescents’ problems.

2. Adolescence as an important time for self esteem change

Some research has proposed that adolescents should be targeted for self esteem enhancement. Battle (1984) found that adolescents (aged 15-17) and the elderly (aged 65+) earned lower self esteem scores than young and mature adults (aged 18 - 24, and 25 - 64, respectively). Thus, he recommended that adolescents and the elderly should be targeted for self esteem enhancement. Battle (1987) noted that self esteem was stable and gradually developed, but there was a self esteem disturbance in adolescence. Thus, intervening during or prior to its initial disturbance may reduce the negative affect of this disturbance, and /or facilitate more development after its disturbance. Battle went on to explain that self esteem enhancement was a growth oriented process which was based on the premise that all children can improve their ability to develop their potential more effectively. "Thus the process of enhancing self esteem should be the goal for all children, whether they possess low, intermediate or high self esteem" (Battle, 1987, p. 77). Other researchers have noted that characteristic adolescent problems are associated with self esteem such as depression, anxiety, and increased drug and alcohol use (Goldney, 1982; Fimian & Cross, 1986; Uribe & Ostrov, 1989 respectively). Thus, these studies lend further support for adolescents' self esteem enhancement, as increased self esteem reduces the negative impact (or instances of) negative events/states, and enhances their well being.

Self esteem and adolescence - The pattern of change and why it changes

Battle (1981, p. 14) stated that "[a]n individual's perception of the self develops gradually and becomes more differentiated as he matures and interacts with significant others. Perception of self worth, once established, tends to be fairly stable and resistant to change". Battle (1987) found that self esteem was gradual in its development until it stabilized at approximately age 10, and with increasing age became more stable and differentiated. Yet there was a disturbance in self esteem during adolescence. Different researchers alternatively described self esteem in adolescence as fluctuating (Rosenberg, 1979, 1986; Wexler, 1991), and low (Newton, 1995). Newton (1995, p. 83) stated there was "a tendency for self-esteem to be relatively low during early adolescence", and found that self esteem built during adolescence, with characteristic levels in each stage of adolescence. Rosenberg (1979) also noted decreased global self esteem in early adolescence. The American Association of University Women (AAUW) study (as cited in Meece, 1997; and Anderson & Hayes, 1996) found that there was a decline in self esteem (more severe for girls) as girls and boys entered adolescence, and that self esteem was generally re-established by late adolescence.

Early, middle, and late adolescence seem to correspond to general stages in self esteem development. During the withdrawal and isolation stages (approximately ages 11- 16), "teens are overly self-conscious and self-critical" (Newton, p. 83). Rosenberg (1979, 1986) noted that self esteem declined starting at age 10, reached its lowest point between

ages 12-14 (early adolescence), and then started to improve. Newton (1995) noted that during middle adolescence (approximately 14-16) activities such as fantasy, successful role experimentation, and developing competencies may contribute to a rise in self esteem. Late adolescence (approximately 16 - 18 years old) is associated with "experimentation with roles and efficacy behaviours [that] lead to integration of selves into [a] coherent self" (Newton, 1995, p. 83), and increasingly stable self esteem. Rosenberg (1979, p. 239) explained that "global, but not specific self esteem, rises in later adolescence". Improvement in global self esteem may be due to many factors: a universal desire for high self esteem (McCarthy & Hoge, 1982), enhanced competence and social skills, which produced improved reflected appraisals, social comparisons, and self attributions (Rosenberg, 1979), and/or enhanced freedom and autonomy in adolescence in selecting peers and contexts likely to enhance self esteem (Rosenberg, 1986).

Harter (1990a) explained that the magnitude of self esteem change in adolescence was largely dependent on pubertal change and the impact of the school environment (a match or mismatch between the school environment and young adolescent's needs). Harter (1986) and Newton (1995) noted that changes in educational environments, such as transitions from elementary to junior high school and junior to senior high school, (respectively), affected one's self worth. This self worth change occurred at a time when there were increased academic demands and other developmental changes, such as cognitive, pubertal, social status (e.g., from high status in the previous school to low

status in the new, upper grades school). Harter (1990a) noted that students who experienced self esteem decreases after an educational transition reported less social support after the transition, and displayed increased discrepancies between the importance of success in particular domains and their perceived competence in the domain. Thus, educational transitions affect both preadolescent and adolescent self esteem.

Self consciousness is a typical part of adolescence (Lerner, 1997). Early adolescents perceive themselves as performing to an “imaginary audience” (others are watching them), and “tend to use a peer group as a social form of self-evaluation” (Newton, p. 125). This is similar to Cooley’s (1902) looking glass self theory, in which others are a social mirror referred to to detect others’ opinions toward them, and influences feelings about the self. This characteristic self consciousness could affect adolescents’ self esteem, in that the adolescents’ self esteem is partially derived from others’ opinions. Harter (1996, p. 39) stated that adolescents endorsing the looking glass self “fare worse in terms of greater preoccupation with approval, [had] greater fluctuations in self esteem, [and] lower levels of both approval and self esteem, as well as [greater] distractibility in the classroom”.

Influences on self esteem change with age

Previously, it was noted that self esteem changed with age. It should be noted that the *influences that affect self esteem also change as children age* (Rosenberg, 1986).

Rosenberg noted four influences on self esteem; sociodemographic, behavioural, interpersonal, and contextual influences. Social class was found to affect children, but had a stronger effect on adolescents' self esteem. Behavioural influences also change; occupational success effects self esteem more than school marks after adolescents graduate high school. Interpersonal influences change between childhood and adolescence, as children are more influenced by "perceived parental attitudes towards the self", whereas peer judgements are more influential with adolescent self esteem (Rosenberg, 1986, p. 123). Contextually, feelings of self esteem were highest when adolescents were with their friends, and lowest when they were in a classroom.

Problems associated with low self esteem

Low self esteem has been defined in many related ways. Rosenberg (1979, p. 54) described a person with low self esteem as "lack[ing] respect for himself, consider[ing] himself unworthy, inadequate, or otherwise seriously deficient as a person", and as innately dissatisfying and not pleasurable. Hattie (1992, p. 252-3) described low self esteem as:

Differentiation without a common thread; believing that you are more at the mercy of the whims of others and environment; having less control; being less effective in engaging others; leads to difficulties in accepting others, coping with

the world and the individual's place in the world; and it makes it difficult for the individual to predict outcomes of interactions that would enhance coping more effectively next time.

Battle's (1987, p. 30) profile of the child with low self esteem stated that the child/adolescent:

Generally possess[es] pessimistic views regarding themselves and their ability to exert a significant effect on their environment. The youngster . . . typically does not consider himself to be as competent as his chronological age mates and generally lacks confidence in his ability to perform academic tasks. These children tend to display a dysphoric (unhappy) disposition, and they typically feel that parents and other significant others do not love and prize them as much as they should. The child . . . usually experiences difficulties in his or her interpersonal interactions with peers and rarely assumes positions of leadership.

Pope et al. (1988) and Newton (1995) explained that low self esteem resulted from large discrepancies between the "perceived" or "actual self" (an objective view of present/absent skills, characteristics, and qualities) and "idealized self" (image of the person we would like to become). Brown (1993, p. 50) perceived the difference between low and high self esteem as a "difference in emphasis and style rather than substance". He went further to explain that both groups boosted their self evaluations in response to self worth threats, though the people with low self esteem used indirect forms of self enhancement after failure. People with high self esteem use direct forms of self enhancement after failure; they take active steps to offset the negative implications of failure by boosting their own qualities (e.g., "I have worthy/good characteristics"). Alternatively, the person with low self esteem tends to passively accept the negative

implications of failure, and seeks to indirectly/ vicariously increase their self worth by exaggerating other's qualities with whom they are associated (e.g., "my classmates/ family/ spouse/ group have these 'good' characteristics"). The person with low self esteem uses others as extensions of themselves in an attempt to indirectly increase one's self esteem (Brown, 1993). Worthy of note was Westera and Bennett's (1990) finding that Newfoundland adolescents' did not feel "as good as" others, which Brown (1993) would consider an indication of a lower level of self esteem (e.g., an attempt to vicariously increase one's own self esteem through others).

Table 1 provides an overview of a literature review detailing associations between low self esteem and one's cognitions (which includes one's thoughts, beliefs and perceptions), emotions and behaviours. It should be noted that in some cases, it was not clear as to the cause and effect relationship between low self esteem and the cited problem. Regardless, it would appear the low self esteem was innately dissatisfying and not pleasurable (Rosenberg, 1979), and was linked to poor well being (Battle, 1987; Wilson & Petruska, 1982).

Table 1
Summary of low self esteem's affect on the individual*

Cognitions	Emotions	Behaviours
Decreased beliefs in one's ability to achieve academically	Increased depression	Increased submissiveness
Increased beliefs in self as inadequate/ deficient	Increased emotional disturbance	Increased destructiveness
Increased artificially positive perception of the world (as proof to self and others of their worth)	Increased anxiety	Increased withdrawal from others
Increased perception of negative feedback as accurate	Decreased feelings of satisfaction with life	Increased passivity in adapting to environmental demands and pressures
Increased belief that others will reject him/her	Increased feelings of jealousy	Decreased personal acceptance
Increased negative views of various dimensions of the self	Increased negative affective states	Increased involvement in exploitive relationships
Increased perceptions of task failure as indicative of future failure in new and unrelated tasks	Increased fear of intimacy	Decreased willingness to express controversial opinions, even when they know they are correct
Decreased beliefs in future success, despite past/present experiences with success	Increased emotional immaturity	Increased tendency to be an invisible member in social groups; rarely serve as a leader
Increased beliefs that he/she has greater difficulties in forming friendships than others	Increased fear of success	Increased tendency to be isolates

Table 1 (con't)

Cognitions	Emotions	Behaviours
Increased belief in self as 'defeated'	Increased loneliness	Increased retreat into himself/herself and withdrawal from others
Increased perception of self as responsible for experienced negative events	Increased/ inconsistent feelings of distress	Increased tendency to remain quiet if he/she feels that dissent will evoke a personal attack
Increased use of negative schemas/perceptions to interpret one's environment	Increased feelings of inferiority	Increased strong, defensive reactions to criticism
Increased perception of self as socially unacceptable	Increased timid feelings	Increased participation in deviant/ delinquent behaviours
Decreased use of self serving and self protective attributions	Increased feelings of self hatred	Decreased academic performance / underachievement at school and work
Increased perception of deviant behaviours as positive or acceptable	Increased feelings of vulnerability	Decreased positive risk taking (e.g., not attempt difficult tasks) Increased tendency to give in to peer pressure Decreased task performance and persistence following failure Increased tendency to wait for others to come to them, rather than ask for help (may negatively affect achievement)

Table 1 (con't)

Cognitions	Emotions	Behaviours
		Increased rejection of positive information about him/herself
		Increased negative response to others' critical appraisal
		Decreased /limited ability to take others' perspectives
		Increased abusive treatment (violence, molestation)
		Increased sexual dysfunction
		Increased suicide/ attempts
		Increased aggression
		Increased anomia
		Increased substance use/ abuse
		Increased risk of school delinquency and dropping out of school
		Increased intro-punitive tendency (e.g., being hard on oneself)
		Increased maladjustment to environmental demands
		Increased negative attachments to self/ others
		Increased involvement in risky sexual behaviour leading to pregnancy

Table 1 (con't)

Cognitions	Emotions	Behaviours
		Increased frequency to turn inward and dwell upon themselves when distracted by personal concerns
		Increased tendency of having fanatical allegiance to sports teams, excessive patriotism, and hero worship
		Decreased agreeableness with others
		Increased irritability

* Sources: Bachman, 1970; Battle, 1978; Branden, 1988; Brown, 1993; Campbell, 1981; Coopersmith, 1967; Cruz Perez, 1973; Downs & Rose, 1991; Fimian & Cross, 1986; Greenier, Kernis, & Waschull, 1995; Harter, 1990a; Kernis, 1995; Krupp, 1992; Luck & Heiss, 1972; Mruk, 1995; Pope et al., 1988; Rosenberg 1965, 1986; Rugel, 1995. Shrauger & Rosenberg, 1970; Shrauger & Sorman, 1977; Skager & Kerst, 1989; Skoolvik, 1990; Uribe & Ostrov, 1989; Zimmerman et al., 1997.

Table 1 details low self esteem's correlation with many negative cognitions, emotions, and behaviours, that negatively contribute to one's well being. Adolescents' initial drop and slow increase in self esteem place them more at risk for negative cognitions, emotions, behaviours associated with low self esteem, thus, are more susceptible to a lower state of well being. Essentially, people with low self esteem "experience virtually every negative emotion more intensely" (Kernis, 1995, p. 125). Students with low self esteem are caught in a cycle in which negative perceptions of their ability foster the formation of additional negative feelings. Students' possibilities and achievement are

limited by their inability to take risks and face the challenges of life (Hodges & Wolf, 1997). Thus, to increase self esteem would increase an adolescent's abilities to cope with life both in school and in the world beyond school.

Benefits of high self esteem

High self esteem has various definitions in the literature. Pope et al. (1988, p. 2) defined high self esteem as "a healthy view of the self", in which there were positive evaluations about the self, and positive feelings about one's strong points without being harshly critical of one's shortcomings. Rosenberg (1979) explained that high self esteem referred to having self respect, considering oneself a person of worth, and appreciating one's own merits while recognizing his/her faults (faults they hope and expect to overcome). Battle (1987, p. 27-28) outlined a schematic profile for a youth with high self esteem:

Generally considers [him/herself] to be capable with dealing effectively with the demands of the internal and external environments. Thus the child perceives that he is loved by significant others (especially parents) and that he is worthy of this love. The child . . . considers interpersonal relationships with peers to be positive and mutually beneficial, typically feels that peers regard him highly and respect his point of view. The child . . . typically feels that he is at least as smart as his chronological age mates, and generally reports that he is satisfied with his performance at school.

Brown (1993) noted that people with high self esteem believed they possessed many positive qualities, particularly in relation to others, and were 'good' at many things.

Rosenberg (1979, p. 54) noted that a person with high self esteem "does not consider himself better than most others but neither does he consider himself worse". Pope et al.

(1988) and Newton (1995) proposed that high self esteem resulted from small discrepancies between the “perceived” or “actual self” and “idealized self”.

Mruk (1995) explained that positive or high self esteem was associated with positive mental health/psychological well being. He reported a correlational link between self esteem and “personal adjustment, internal control, the likelihood of a favourable outcome in therapy, positive adjustment to aging and old age, autonomy, and a tendency toward androgyny”(p. 1). Phelan (1995, p. 115) also referenced the positive self esteem - well being relationship in his statement that “[r]ealistic and positive self esteem is essential to maintaining a good mood, asserting oneself with confidence, getting along with others, and even keeping physically healthy”. Ortman (1988) showed that adolescents’ feelings of satisfaction depended partly on having some control over their lives, the ability to make choices, and assuming responsibility for their own behaviour. Thus, early intervention into self esteem development may make it easier to heighten self esteem in adolescence, provide the adolescent with a “good” evaluation of their self-concept, boost self esteem before it stabilizes and becomes more “ingrained” into the person’s personality, and promote positive adolescent self esteem.

Table 2 provides an overview of a literature review detailing associations between high self esteem and one’s cognitions, emotions and behaviours. It should be noted that in some cases, it was not clear as to the cause and effect relationship between high self

esteem and the cited situation. Regardless, it would appear that reasonably high self esteem was linked to positive well being (Deci & Ryan, 1995; Mruk, 1995; Rosenberg et al., 1995; Torres et al., 1995).

Table 2
Summary of high self esteem's affect on the individual*

Cognitions	Emotions	Behaviours
Increased belief in one's ability to deal with situations	Increased feelings of happiness	Increased effectiveness in meeting environmental demands
Increased beliefs in self's effectiveness in dealing with internal and external environmental demands	Decreased feelings of anxiety in various situations	Increased use of active and assertive behaviours
Increased beliefs that one is loved by significant others (especially parents) and that he/she is worthy of this love	Increased feelings of self love	Increased alteration of work performance in relation to the work groups' supportiveness (adaptiveness)
Increased perception that self's interpersonal relationships with peers are positive and mutually beneficial	Increased feelings of being proud of him/herself	Increased positive interactions with peers (resulting in popularity)
Increased beliefs that self is autonomous	Increased feelings of superiority	Increased participation in exploratory and independent activities
Increased beliefs that self will succeed	Increased feelings of satisfaction with self's performance at school and work	Increased use of self serving defences against threats and others' attempts to demean him/her

Table 2 (con't)

Cognitions	Emotions	Behaviours
Increased beliefs that self is at least as smart as his/her chronological age mates		Increased persistence and motivation in school
Increased belief that self's chosen career will be satisfying		Increased behaviours leading to academic success in school
Increased belief that self has the abilities to succeed at his/her career		Increased work output in response to significant negative feedback
Increased / more favourable efficacy beliefs		Increased positive responses to stress
Increased positive thoughts about the self		Increased resistance of negative social judgements
Increased thoughts of self acceptance		
Increased thoughts of self respect		
Increased beliefs that peers regard him/her highly and respect his/ her point of view		
Increased beliefs that self is a person of worth		

*Sources: Battle, 1987, 1991; Brockner, 1988; Brockner & Elkind, 1985; Coopersmith, 1967; Irwin & Schafer, 1992; Krupp, 1992; Meece, 1997; Mossholder, Bedeian, & Armenakas, 1981, 1982; Pope et al., 1988; Ryckman & Rodda, 1972

Table 2 outlines the positive effects of high self esteem on people's cognitions, emotions, and behaviours (work and non work related). Worthy of note is the study by Irwin and

Schafer (1992), which found that high self esteem was associated with lower rates of early sexual activity, a relevant phenomenon in today's adolescents. Other research has noted that modern day adolescent promiscuity and sexual activity at younger ages has led to a "proliferation of sexually transmitted diseases and later difficulty with development of intimate relationships, . . . teenage pregnancy, and inability to establish stable families, thereby affecting the next generation" (Newton, 1995, p. 98-99). Thus, increasing self esteem may be a useful part of a larger effort to prevent teen pregnancies and increase one's quality of life.

Krupp (1992) noted that a self esteem cycle exists; positive self esteem begets more positive self esteem, and lower self esteem results in further negative self feelings. Thus, if an adolescent's self esteem was increased, the virtue of having high self esteem seemed to ensure it remained high or at least was less likely to become negative. These higher self esteem levels would reinforce themselves with further advances and maintenance of high self esteem. An adolescents' high self esteem insulates him/her from the negative effects of situations they encounter (e.g., could resist peer pressure), and allows him/her to be faced with their shortcomings yet not be negatively affected by them (Kissiar & Hagedorn, 1979; Pope et al., 1988; Rosenberg, 1979).

It should be qualified that high self esteem is not always a positive thing; in the extreme or distorted range, self esteem can have the opposite affect. Brown (1993) noted that the

pervasiveness of high distorted self esteem was probably low (yet still important). Coopersmith (1967) reported that in his studies, 10% of people had 'overly high' self esteem. Deci and Ryan (1995) noted that the negative effects of overly/ unsuitably high self esteem included other's angry and aggressive responses toward him/ her, and one's egotistic illusions leading to poor performance. Greenier et al. (1995) noted that people with unstable high self esteem may be threatened by a variety of negative self relevant events, and engaged in more self enhancing and self protective strategies. Yet Greenier et al. also highlighted the importance of high self esteem in combatting this reaction, as people with (reasonably) high self esteem felt they were worthwhile individuals, were satisfied and liked themselves, had confidence in their abilities and skills, yet accepted their weaknesses. Therefore, they do not need continual validation of their worth to feel worthy.

Gender differences in adolescent self esteem

Adolescent females are particularly susceptible to unique problems stemming from self esteem. Newton (1995, p. 187) noted that "[f]or some girls, self identification with body shape is especially problematic If somehow they can improve their body appearance, they think they will feel better inside. These young women have merged their identity and self-worth with appearance and body shape". A study by the American Association of University Women (as cited in Meece, 1997; and Anderson & Hayes, 1996) found that gender differences in self esteem arose in early adolescence, due to

physical changes and social environment. Girls suffered lower levels of self esteem throughout adolescence, and entered adulthood with “lower levels of self esteem, poorer self image, and lower life expectations than their male counterparts” (Meece, 1997, p. 335). Early maturing girls were especially susceptible to low self esteem (Brooks-Gunn & Peterson, 1983). Rosenberg (1986) noted that physical attractiveness was one area in which adolescent females had lower self esteem than males. Thus, people working with adolescents should pay particular attention to developing female adolescents’ self esteem.

Interventions to enhance adolescents’ self esteem

Battle (1987; 1990) recommended that adolescent’s self esteem be targeted and outlined many successful self esteem enhancement programs for children and adolescents. Early intervention in self esteem development may make it easier to heighten self esteem in adolescence, provide the adolescent with a positive evaluation of their self-concept, and boost self esteem before it stabilizes and becomes more ingrained into his/her personality. Thus, intervention at this time could foster positive adolescent self esteem formation. As previously mentioned, self esteem is a multidimensional phenomenon, thus enhancement strategies should address specific facets of self esteem (Battle, 1987, 1990). The effects of these self esteem enhancement programs which target a specific facet may be important to other facets of self esteem. “For instance, activities that are intended to enhance or promote academic self esteem may have a generalizing effect, and as a consequence may enhance general and social self esteem as well” (Battle, 1987, p. 89).

The role of educators and parents in developing youth's self esteem was outlined by Battle (1987), who advocated a team approach to enhancing adolescent self esteem as likely to be most successful. Battle (1987; 1990) provided many self esteem enhancement strategies for general, parent-related, social, personal, and academic facets of self esteem. It seemed that in all these facets of self esteem, positive interactions between the adolescent and significant others (e.g., teachers, parents), and success experiences (success at important tasks) contributed to enhancing the adolescents' self esteem (Battle, 1990).

General self esteem refers to people's (e.g., adolescent's) overall general perceptions of their worth (Battle, 1990). General self esteem can be enhanced through self image enhancement (especially important for adolescent females), individual counselling (addressing problems the adolescent is experiencing), and group counselling programs (addressing the adolescent group's problems and permitting adolescents to exchange their perspectives) (Battle, 1987). Physical training programs that promote "wellness, cardiovascular efficiency, strength, endurance, and general well being [also] exert a positive effect on one's general self esteem" (Battle, 1990, p. 180). Battle also noted that reasonable and obtainable personal expectations positively affected adolescent and adult self esteem.

Parent/home related self esteem refers to the adolescent's "perception of his status at

home - which includes his subjective perceptions of how his parents view him” (Battle, 1987, p. 87). Battle explained that parents had the strongest effect on their children’s self esteem and should “make overt attempts to provide children with mutual respect, unconditional positive regard, and encouragement” (p. 89). Parents can seek aid in counselling (group or individual) and positive focussing on the parent - child interaction, in learning to enhance their adolescent’s parent - related self esteem. Counselling would include having the parent learn positive communication and interaction patterns, effective child management strategies, and learning how to help their child explore and develop problem solving and self enhancing behaviour. Parent-child interactions are “crucial to the well being of the child” (Battle, 1987, p. 89). Parents who wish to develop positive parent-child interactions should focus on how they interact with the child to ensure the child feels worthy and loved.

Social self esteem refers to the adolescent’s perceptions of interpersonal peer relationships (Battle, 1990). Harter (1986) noted that social competence, or the belief that one had the ability to successfully navigate social relationships, was one of the most valued competencies in adolescence. Thus, social self esteem is an important area for adolescent esteem enhancement. Social self esteem can be enhanced through counselling; both individual (addressing problems the adolescent is experiencing of a social nature), and group counselling. Class discussion facilitated the development of interpersonal, problem solving, and communication skills, and “provide[d] opportunities

for emotional and intellectual rehearsal, reassurance, and support, and chances to deal with specific problems of group members" (Battle, 1987, p. 79). Other ways to increase social self esteem include a 'jigsaw puzzle ' technique, school camping trips, and programming. The jigsaw puzzle technique emphasises mutual respect and cooperation between students, rather than in-class competitiveness. School camping trips can foster increased emotional growth, social adaptive behaviour, and cooperation. Programming can also be specifically designed to increase youth's feelings of personal effectiveness, self confidence, and understanding of interpersonal relationships (Battle, 1987). One such school curriculum/ program may be the Newfoundland Department of Education's Grade Nine "Adolescence" course (e.g., Casey, 1991). Social self esteem can also be increased through assertiveness training, which is beneficial in interpersonal situations, and social skills development programs, which promotes more positive interactions (Battle, 1990)

Academic self esteem is very important in adolescence. This is due to the relationship between increased options for the adolescent's future and academic success (e.g., post secondary options, career entries, scholarship opportunities). Self esteem is significantly associated with students' perceptions of ability to perform academic tasks (Battle, 1991), as well as academic achievement (Battle, 1987). Academic self esteem can be enhanced through parent training programs, peer tutoring programs, and teacher-pupil interactions (Battle, 1987). Earlier, it was noted that parents strongly affect their children's self

esteem, and needed to use mutual respect, unconditional positive regard, and encouragement with their children. Brookover and Thomas (1964) found that parents involved in group sessions designed to help them help their children to develop more effectively led to enhanced self esteem and increased their children's academic achievement. Peer tutoring programs have increased both the tutor and tutee's academic self esteem, in addition to "improvement in motivation, sense of responsibility, . . . [and] attitudes in school" (Battle, 1987, p. 83). He further explained that the teacher-pupil interaction was a "major force affecting the academic self esteem of students" (p. 84). A positive teacher-pupil interaction process included the teacher's communications to the student that he/she was a person of worth, and that this evaluation was not contingent on any predetermined condition. The teacher would also provide structure, clear behavioural expectations, and a sense of student responsibility to function in this fashion and assume responsibility for their actions. This positive teacher-pupil interaction process enhances adolescents' academic self esteem and academic achievement. Battle (1990) noted that self esteem can be promoted by teachers who set the appropriate atmosphere, and he wrote a "first day of class" script for junior and senior high teachers to help create this atmosphere. He went further to report "seven secrets" for facilitating adolescent self esteem: structure tasks to build in success; be non-judgmental and emphasize the adolescents' positive behaviours; develop adolescents' successes to create new successes and interests; use adolescents' sparks of interest to develop new skills and interact effectively with others; acknowledge adolescents' accomplishments; have realistic

expectations for students; and make the topics exciting and active. Battle (1987) explained that the teacher-pupil interaction process affected the students' perceptions of ability to achieve academic success (one's self efficacy in attaining the academic goal) and actual academic success, and that academic self esteem was more closely related to perceived academic success than actual success. Thus, teachers can foster adolescents' development of perceived academic success and academic self esteem, as well as create a milieu promoting self esteem enhancement.

Battle (1990, p. 181) noted that personal self esteem referred to "the individual's most intimate perceptions of self worth". He further explained that this facet of self esteem can be enhanced through unconditional positive self regard, encouragement, problem resolution programs, mutual respect, and psychotherapy. Unconditional positive regard involved significant others communicating to each other that they love him/ her unconditionally, and that their own caring and praise was not based on any predetermined conditions. Encouragement referred to significant others' emphasis on each other's positive behaviours, recognition of their assets and strengths, and minimizing their mistakes. Problem resolution training programs entailed instruction in problem solving skills (how to clarify problems, explore alternatives, assess the consequences of alternatives, and choose self enhancing modes of behaviour). Mutual respect involved significant others communicating to each other that they were respected and had the same basic rights as others "of similar age and status" (Battle, 1990, p. 182). Battle also noted

that psychotherapy involving a therapist's non-judgmental interactions, mutual respect and unconditional positive regard toward the adolescent could increase adolescent self esteem.

Battle (1990) noted that parents, teachers, and psychotherapists were three important caretaker groups who promoted self esteem enhancement in our culture, chiefly through interactive strategies. He later noted that many programs that claim to enhance self esteem are effective because of the program's interactive nature, rather than the program's content (Battle, 1991). Such interactive programs typically include mutual respect, unconditional positive regard, encouragement, and reflective listening (reflecting the feelings as well as the meanings of others' communications). Other positive adolescent self esteem enhancing programs noted in the literature involved positive adjective feedback to adolescents, (Mruk, 1995), metacognitive training in strategic use of language information (Battle, 1987b), and junior leadership and exposure to interactive strategies (e.g., teacher's emphasis on mutual respect and encouragement) both outside and within a school setting (Battle 1991). Harter (1986) drew upon William James' writings (e.g., James, 1890) and found two practical ways to alter one's self esteem. Self esteem could either be altered by lowering one's pretensions or increasing one's levels of success, or altering one's perceptions of control by increasing responsibility for one's successes and decreasing responsibility for one's failures (similar to a positive attributional style). Adolescents' participation in extracurricular activities, club

memberships, and elected positions and discussions were also associated with high levels of self esteem (Wylie, 1989).

Conclusion

Self esteem, one's feelings of self worth, drops initially in early adolescence, though gradually increases throughout adolescence. This general pattern holds true for both male and female adolescents, although female adolescents were noted as typically having lower self esteem levels within and beyond adolescence. Adolescence may be a good time to target self esteem enhancement as self esteem is associated with many common adolescent problems, and plays a foundational role in adolescent well being. Self esteem can affect one's cognitions, emotions, and behaviours in positive and negative ways, which contribute to/ detract from adolescents' well being, respectively. High self esteem insulates the adolescent from the negative effects of negative situations (e.g., peer pressure), and allows him/her to face his/her shortcomings yet not be negatively affected by them. Some positive effects of high self esteem include beliefs that adolescents are equal to and respected by their peers, feelings of self acceptance, and positive effects on achievement behaviour. This paper lists adolescent self esteem interventions, with the intention that people involved with adolescents will use the interventions to increase adolescents' self esteem and well being. Parents and educators should provide an environment where self esteem can be enhanced or maintained, either through interactions with adolescents, the setting in which they live and work, counselling, or in a

more direct approach of enhancing self esteem through specific programs.

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**Enhancement of Adolescent Well Being
Through Enhancement of Self Efficacy**

by

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Abstract

This paper addresses the issue of enhancing one aspect of adolescent self, self efficacy. The relationship between well being and some common adolescent problems will be discussed. Self efficacy will be discussed in detail, including definitions of self efficacy, theory development, and influences on self efficacy's development. Self efficacy's effect on adolescents' cognitions, emotions, and behaviours, including specific examples of adolescent high and low self efficacy are also discussed. Characteristic self efficacy changes in adolescence, gender differences, self efficacy's relationship to other variables, and intervention strategies are outlined. This paper is intended for people (e.g., educators, parents, etc.) dealing with adolescents, to highlight the importance of self efficacy in adolescents' self and well being, and outline methods to enhance adolescent self efficacy and well being.

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Self efficacy's relationship to adolescent well being and common problems

Self efficacy entails a belief of personal control, and a feeling of competence to carry out courses of action (e.g., coping, solving problems, making decisions). Research has found that self efficacy beliefs contribute to one's physical, psychological, and psychosocial well being (Bandura, 1986, 1990, 1997; Nicholls, 1990), psychological health (Allgood & Stockard, 1992), social competence and mental health (Connolly, 1989), psychosocial functioning (Bandura, 1986), healthy development throughout the lifespan (Phillips & Zimmerman, 1990), one's accomplishments (Bandura, 1997), and higher levels of adjustment (Phillips & Zimmerman, 1990). Negative performance effects derived from one's preoccupation with their deficiencies are reduced by self efficacy beliefs (Bandura, 1977). Thus, self efficacy is one psychological variable related to, and can be used to enhance the development of, adaptable, resourceful and successful adolescents.

Self efficacy is related to adolescent health behaviours. Research has shown that adolescents' perceived self efficacy was a significant predictor of health promoting behaviour (Barnett, 1989). Barnett found that the higher the adolescents' perceived self efficacy, the greater the number of health promoting behaviours in which they engaged. O'Leary (1992) also noted that self efficacy was related to the adoption of health promoting behaviours, such as smoking cessation and safer sex practices (e.g., condom use). The author further explained that self efficacy was also related to positive physiological stress responses, such as decreased reactions from the sympathetic

adrenomedullary system (which is linked to the 'flight or fight' response), hypothalamic pituitary adrenocortical systems (linked with depression and experiences of overwhelming threat), and reduced stress on the immune system (which led to reduced susceptibility to infections, ulcers, headaches, etc.). Rabinowitz, Melamed, Weinsberg, Tal, and Ribaket (1993) found that self efficacy was positively related to leisure time exercise activities in late adolescence and adulthood, and this relationship generalized to healthy eating habits. Cusatis and Shannon (1996) further supported this adolescent self efficacy - healthy diet relationship. These authors noted that self efficacy for healthful eating was important as adolescents typically did not meet dietary requirements for healthy physical growth. Self efficacy has been linked to other behaviours with health related consequences, such as early and risky sexual behaviour (Basen-Engquist & Parcel, 1992; Bandura, 1997; Jemmott, Jemmott, & Fong, 1992a; Jemmott, Jemmott, Spears, Hewitt, & Cruz-Collins, 1992b, Walter et al., 1993). Bandura (1997) explained that adolescents' low self efficacy for personal control led to an increased likelihood of engaging in early or risky sexual behaviour. Levinson (1985) researched risky adolescent behaviour and found that high/ low contraceptive self efficacy was directly related to contraceptive use/ non-use in sexually active adolescents, respectively. Walsh and Foshee (1998) studied adolescent dating violence/rape and found that weaker levels of self efficacy were linked with female adolescents' increased likelihood of forced sexual activity. Allen, Leadbeater, & Aber (1990) conducted studies of health related behaviours and self efficacy. These authors found that low self efficacy was related to adolescent

substance abuse and higher self efficacy predicted the success of drug treatment programs.

Bandura (1986) explained that periods of development bring new challenges to coping efficacy; in adolescence, two such challenges included intimate relationships and development of post secondary options (e.g., career concerns). Research has revealed other adolescent efficacy concerns, such as the importance of attaining self regulatory efficacy (Bandura, 1997), and adolescents' concern of time management (Westera & Bennett, 1990). Pajares (1996) noted that low self efficacy also led to inaccurate beliefs that things were tougher than they actually were, which fostered two common adolescent feelings - stress and depression. Other research found that self efficacy affected academic achievement (Multon, Brown & Lent, 1991; Schunk, 1984). Bandura (1986) noted that perceived self efficacy predicted the degree and change in many types of behaviours and experiences. Some behaviours and experiences linked to self efficacy included "social behaviour, coping behaviour, stress reactions, physiological arousal, depression, pain tolerance, physical stamina, behavioural self regulation, self motivation, achievement strivings, athletic attainments, and career choice and development" (Bandura, 1986, p. 430). Adolescent tendencies of dwelling on personal deficiencies, being overly self critical, feelings of not being "as good as" others, and being overly concerned with peers' opinions of the self involve self doubts about one's competencies, as well as social self efficacy. Thus, self efficacy is related to adolescent problems, concerns, and well being.

Therefore, the question arises, what is self efficacy?

What is self efficacy?

Self efficacy originated from social learning theory, which postulated that people's perceptions of their capabilities influenced their actions, motivation, cognition patterns, and emotional reactions in demanding situations (Breakwell, 1992). Bandura (1997, p. 42) stated that:

In social cognitive theory, efficacious personality disposition is a dynamic, multifaceted belief system that operates selectively across different domains and under different situational demands. . . . The patterned individuality of efficacy beliefs represents the unique dispositional makeup of efficaciousness for any given person.

Self efficacy is an important aspect of the self system (Bandura, 1986), and is a self evaluative phenomenon defined in various ways. Bandura (1977, 1982) defined self efficacy as the person's evaluation of their capabilities to perform acts needed to attain the desired goal. Bandura and Schunk (1981, p. 587) noted that self efficacy dealt with "prospective situations containing many ambiguous, unpredictable and often stressful elements". Self efficacy has also been defined as beliefs that "one can accomplish or have an impact" (Wexler, 1991, p. 25), use of effective coping in situations (Rosenbaum, 1990), "student's beliefs regarding their ability to meet task demands" (Mushinski Fulk & Montgomery-Grymes, 1994, p. 28), and "individual's beliefs about their ability and/or motivation, and whether such attributes will enable them to perform necessary

behaviours" (Brockner, 1988, p. 14). Therefore, self efficacy is concerned with judgements of "what one can do with whatever skills one possesses" (Bandura, 1986, p. 391). Self efficacy has been noted as an important component of self concept (Breakwell, 1992; Pajares, 1996), and a facet of one's identity (Breakwell, 1992; Harter, 1990a). A person can hold efficacious beliefs in their capabilities to succeed at a task (a high or strong sense of self efficacy), or may be uncertain as to their capabilities and hold inefficaciousness beliefs (low self efficacy).

The importance of self efficacy beliefs is highlighted in this statement, "[p]eople guide their lives by their beliefs in personal efficacy" (Bandura, 1997, p. 3). The author further noted that self efficacy is a key factor of human agency (acts done intentionally), in that one believes he/ she has the power to produce results, can exercise control over action, and involves "self regulation of cognition processes, motivation, and affective and physiological states" (p. 30). Research has shown that self efficacy influenced courses of action people pursued, task effort and persistence in stressful situations, resilience to adversity, levels of attained accomplishments, was a partial determinant of experienced stress and depression levels when coping with taxing environmental demands, facilitated self aiding or self hindering cognition patterns, affected people's cognitions, emotions and behaviours, and reinforced self efficacy beliefs (Bandura, 1977, 1997; Bandura & Adams, 1977; Bandura & Schunk, 1981; Marsh, 1993; Pajares, 1996). Schunk (1981) noted that this reinforcement of self efficacy in response to different modes of influences

was part of the reason for behaviour change. Schunk (1985) also emphasized that self efficacy was important within achievement settings, influenced task choice (people with low efficacy avoided tasks, and those with higher efficacy participated in tasks), affected motivation (low efficacy promotes less effort and giving up, whereas high efficacy promoted increased effort on difficult tasks), and affected skilful performance. Once formed, self efficacy beliefs can “regulate aspirations, choice of behavioural courses, mobilization and maintenance of effort, and affective reactions” (Bandura, 1997, p. 4) Thus, self efficacy is an important variable in adolescents’ well being.

Self efficacy is an aspect of one’s motivation to perform actions. There are two components in completing an action: the required knowledge to do it, and action (doing) itself (Bandura, 1982b). Bandura further explained that self referent cognition was a mediating variable between knowledge of what to do and action (execution of a response pattern), thus, could be referred to as “a cognitive mediator of action” that affected one’s motivation and behaviour (Bandura, 1982, p. 126). He also noted that self efficacy played a role in developing intrinsic interests (e.g., use of proximal goals to spark interest and efficacy), which influenced behaviour (e.g., competent performance). Therefore, the relationship between self efficacy and action is one in which a person would be more willing and interested in attempting tasks in which he/ she felt competent, and in which one successfully completed tasks that fell within his/ her perceived efficacy range. Conversely, people would avoid participation or were not interested in tasks in which

they did not feel competent, and avoided or failed those tasks that were beyond their perceived coping skills. Self efficacy fostered active engagement in activities and contributed to one's growth in competencies, whereas task avoidance prevented and retarded development of potential competencies (Bandura, 1986). Bandura (1982) noted that one's behaviour seemed to correspond closely with one's level and development of self efficacy, which could be used as an apt summary for these research findings on the action - self efficacy relationship.

Self efficacy's influence on action is both cause and effect, in what Bandura (1997) referred to as "reciprocal determinism". Essentially, personal factors (in the form of cognition, affect, and biological events), behaviour, and environmental factors influence and create interactions between each other, such that the person is both producer and produced by his/ her own environmental and social systems. Breakwell (1992) explained that self efficacy was initially determined by successful performance experiences, but subsequently influenced choice of activities and environments. Thus, self efficacy determined the course of action, which in turn shaped action and meanings attributed to the experiences, and the action reflected changes in self efficacy (Breakwell, 1992). Simply put, self efficacy has a cyclic nature; it influences actions, which in turn contributes and influences one's sense of efficacy (Schunk, 1985).

Competence, or self perceptions of how well one will do (Sternberg, 1990), was another

term analogous with self efficacy. Bandura (1986, 1997) noted that perceptions of competence - that "I am effective" - were critical to individual functioning throughout life, and were a key factor in a generative system of human competence. Markus, Cross, and Wurf (1990) explained that self structures summarized one's competencies, conferred an aspect of identity, and formed one's self schemas. These self schemas in turn allowed people to use their abilities and have a sense of control over them.

Models of self efficacy

There are various models of self efficacy, thus, the following section reviews two major theories on self efficacy. These two models include Harter's self efficacy/ competence model, and Bandura's self efficacy model. The latter model is the more extensive model, thus, will be discussed in detail and with reference to the adolescent experience.

1. Harter's view of self efficacy/ competence

Research has referred to self efficacy as part of one's self concept. Harter's (1986) theory on self concept portrayed self concept as a multidimensional model, and a "profile of evaluative judgements across these domains: scholastic competence, athletic competence, social acceptance, physical appearance, and behaviour or conduct" (p. 139). Harter (1986, 1990) explained that young children lacked the ability to make judgements about self worth. She also noted that in middle childhood (ages 8 - 12) children started to make distinctions between these five domains of their lives, and made judgements about global

self worth. Dusek and Flaherty (1981) have also noted that increased cognitive abilities/competencies underlie emerging self views/concepts. Competence judgements were made in only two of the five domains, scholastic and athletic domains, while the “remaining three domains address adequacies that do not necessarily involve competence” (Harter, 1986, p. 142). This same article explained that using the multidimensional self concept model, scores across the five discrete subscales provided a profile of one’s competency/ adequacy. Adolescent self concept contained three new domains in addition to the five domains listed for middle childhood, (close friendship, romantic appeal, and job competence), and new differentiations between some concepts (e.g., close friendships versus popularity) (Harter, 1990).

2. Bandura’s model of self efficacy

Bandura’s self efficacy theory (1986) envisioned self efficacy as a multidimensional belief system structure derived from various sources of information, was discriminatively generalizable, and promoted active performances and personal causation. Self efficacy was noted as an aspect of self referent cognition, which gave people a sense of control over events that affect their lives, and had broad affects on these lives (Bandura, 1984). Self efficacy was perceived as a common mechanism of personal agency and personal change, a mediator of other behavioural determinants, was predictive of behavioural choices and directions (Bandura, 1984), and influenced motivation (Bandura, 1982b). Bandura (1986) noted that self efficacy was a significant determinant of performance,

operating partially independent of one's underlying skills; for example, people with skills did not always use these skills effectively. Therefore, competent functioning required skills and self efficacy beliefs. Bandura (1997) regarded one's self efficacy to deal with his/ her environment as a "generative capability" (rather than a fixed entity one possessed/ did not possess in their behavioural repertoire). This generative capability involved cognitive, social, emotional, and behaviour subskills integrated into courses of action to manage changing task/situational demands (Bandura, 1982, 1984, 1986, 1997; Bandura & Schunk, 1981). Bandura (1997) further noted that self efficacy theory considered how personal determinants contributed to psychosocial functioning in different task domains and contexts under diverse circumstances. Some researchers have summarized Bandura's self efficacy theory as a person's perception of estimated probable success in a situation that caused efficacy expectations (beliefs he/ she can accomplish/ not accomplish tasks or goals) (Rosenbaum, 1990).

Bandura (1997) explained that self efficacy beliefs affected cognition processes, persistency of motivation, and affective states; all of which were important contributors to one's actions. One example of self efficacy's influence on choice of behaviours includes people's tendency to participate in the activities/ situations they believe they can do or be successful with, and avoid threatening situations they believe exceed their coping skills (Bandura, 1977, 1982). Therefore, people were seen as actively producing their performances (agentic action), rather than passive reactors to situations, or "inert

predictors of future performance" (Bandura, 1997, p. 38). The author also noted that self efficacy beliefs were task and situation (context) specific judgements of one's personal competence. Bandura further explained that high self efficacy in one domain was not necessarily accompanied by high self efficacy in other domains, although one could perceive him/ herself as efficacious over a wide or narrow range of domains.

Bandura (1986) noted that self efficacy was task specific, but conditions existed in which self efficacy on the task generalized to other tasks and efficacies. He explained that self efficacy had to be generalizable to some level and transfer across activities or settings, otherwise this extreme specificity would not be adaptive. Bandura (1997) also noted processes through which mastery experiences produced generality in personal efficacy, which were useful when structuring personal change / efficacy enhancement programs.

Self efficacy can explain and predict a person's behaviour. Bandura (1997) recommended assessing efficacy in very specific areas (e.g., assess math efficacy if concerned with prediction of math performance), rather than try to assess general academic efficacy, when the purpose was explanation and prediction of one's functioning. Bandura (1986, 1997) discouraged against general/ omnibus trait conceptualizations of self efficacy. Global self efficacy assessments were flawed as they did not achieve self efficacy's original purpose: to predict actual behaviour in particular circumstances, the direction and extent of the behaviour change, and account for complex

self efficacy perceptions. Marsh (1993) also noted that global measures of self efficacy were more limited than more specific measures. Bandura (1997) discouraged against general or omnibus trait assessments of self efficacy, but noted that intermediate level measurements (as opposed to very specific or general measurements) could provide acceptable predictiveness, for example in considering perceived efficacy from common (not global) situations or previously non-researched areas.

Influences on efficacy development

Research has noted four principle sources of information people use in judgements of their capabilities, which are integrated to determine one's self efficacy (Bandura, 1977, 1982, 1986; Schunk, 1984). These are: performance accomplishments (alternatively called enactive attainments, direct experience, and mastery experiences), vicarious experiences (or modelling) of observing others' performances, verbal persuasion (or social persuasion) that one possesses certain capabilities, and states of physiological/emotional arousal (or judgements of one's bodily states) (Bandura, 1982, 1982b, 1990; Reeve, 1992; Schunk, 1984). These four sources of information increased performance attainments (Bandura, 1982), including academic capabilities (Schunk, 1984), and seemed most effective in certain conditions. Bandura (1986) noted that any given influence can draw upon one or more of these sources of efficacy information. Yet, these influences on self efficacy were not automatic (Schunk, 1984). The actual effect of self efficacy beliefs varied, due to people's cognitive appraisal of the efficacy information,

problems weighting and integrating this information, referent cognition's increasing likelihood of threatening one's self esteem and social validation, and distorted self efficacy information due to people's activation of self protective processes (Bandura, 1977, 1982, 1982b; 1986). Despite these noted problems, the four principle sources of efficacy information were important to, and could enhance, one's development of self efficacy (Schunk, 1984).

1. Direct experience

Direct experience is the most influential source of efficacy information, due to its basis in authentic mastery experiences (Bandura 1982, 1982b, 1986; Bandura & Adams, 1977). Direct experience involves judgements of one's performance as adequate or inadequate in accomplishing the task/goal. Direct experience with success can increase self efficacy just as repeated failures can lower it, especially if failure occurred early and was not due to lack of effort or "adverse external circumstances" (Bandura, 1982, p. 126). Direct experience enhances self efficacy beliefs by disconfirming people's misbeliefs about a feared task, providing success experiences and experiences with overcoming failure through effort (Bandura, 1982) and producing higher, stronger, and more generalized expectations of personal efficacy (Bandura & Adams, 1977). Bandura (1986) noted that a strong sense of self efficacy prevented occasional failures from significantly affecting judgements of one's capabilities. Another benefit of enhanced self efficacy was that it generalized to other similar situations in which the person's performance had been

negatively affected by “preoccupation with personal inadequacies” (Bandura, 1977, p. 195). He went on to explain that this led to improvements in behaviours and generalization to activities similar, and in some cases different, from the treatment focus. Bandura (1986) also noted that behavioural functioning may improve across a wide range of activities.

2. Vicarious learning/ experience

Research has shown that through vicarious experience, people judge their chance of adequate/ inadequate accomplishment according to other’s successes/ failures (Reeves, 1992), from which they form generalized perceptions of their own capabilities (Bandura 1982). This social comparison process, in which people compared similar others’ successful/unsuccessful task performance, increased/ decreased one’s own efficacy expectations due to personal judgements that he/ she possessed/ did not possess the capability to master similar tasks. Students use this process in school, as they acquire information about their capabilities through observation of similar others in school (Schunk, 1984). Vicarious experience seemed most useful when the person had little experience on which to base personal competence evaluations, thus, modelling influenced their self efficacy (Bandura, 1982b, 1986). Vicarious experience has a weaker effect on self efficacy than direct experience, but can lessen possible negative impacts of direct experience’s previous and future failures (Bandura, 1986, 1982b, respectively).

3. Verbal persuasion

Bandura (1982, p. 127) defined verbal persuasion as one's belief that he/ she "possess[ed] capabilities that will enable them to achieve what they seek". Reeves (1992) likened verbal persuasion to trying to convince people that they could perform a given behaviour; like a "pep talk". Verbal persuasion provides social support, realistic encouragements that leads people to "exert greater effort [and] increase[d] their chances of success" (Bandura, 1990, p. 327), and promotes the development of skills and a sense of efficacy though effort expenditure (Bandura, 1982; 1986). Bandura's research noted that verbal persuasion was most effective in situations when people had some reason to believe they could produce effects through their actions, if this heightened appraisal was within realistic bounds, and when people were led to try hard enough to succeed. Schunk (1984) noted that verbal persuasion increased students' self efficacy, though increases would be short lived if the students' subsequent performance was poor.

4. Physiological/ emotional arousal

Physiological/ emotional arousal occurs due to stressful and taxing situations, or other factors (e.g., tension, fatigue) and can impact one's behaviour (Bandura, 1982b). He went on to state that people "partly judge their capability, strength, and vulnerability [to dysfunction]" using physiological/ emotional arousal (1982, p. 126). Bandura further noted that people generally expected success when they were not experiencing high levels of arousal; high arousal negatively affected performance, signalled vulnerability to

dysfunction, and elevated levels of distress. Research has shown that methods of reducing emotional arousal to subjective threats enhanced self efficacy and performance (Bandura, 1982b, Bandura & Adams, 1977). Self efficacy could be increased through physiological/ emotional arousal via enhancing physical status, reducing stress levels, and/ or altering people's interpretation of their body states (Bandura, 1990).

Other specific instances of self efficacy development have been noted, beyond the four principle sources of efficacy information. Markus et al. (1990) noted that envisioning oneself as a possible self, such as the mental rehearsal in which athletes engage, could enhance self efficacy. Envisioning a positive self involves creating an action plan; committing to the plan may "create a sense of competence, efficacy, or control, and simultaneously promote effective instrumental action" (Markus et al., 1990, p. 212). This mental picture increases one's sense of efficacy in doing or accomplishing the action. Further, these authors noted that perceptions of competence can be created by directing attention, effort, and energy toward a desired action. They also noted that perceived competence affected the person, such that when one felt competent, one was/ will be competent, and "when one feels incompetent, one *will be incompetent*" (Markus et al., 1990, p. 213; italics in original paper).

Factors affecting the strength of efficacy-action relationships

Bandura (1982, 1982b; 1986) explained that there was a link between self efficacy and behaviour. He further noted that many factors affected the strength of this relationship, including faulty self efficacy judgements, misjudged task requirements, motivation to perform an action, inadequate resources, the seriousness of the situation, and the strength of the efficacy perception before the act.

Why is self efficacy important in adolescence?

Bandura (1986, p. 417) stressed the importance of self efficacy beliefs in adolescence. The ease of the adolescent's transition to adulthood was dependant upon "the assurance in one's capabilities" (his/ her self efficacy), which was built up through prior mastery experiences. He further explained that a firm sense of self efficacy was an important motivation to the attainment of further competencies and success. Efficacy beliefs also contributed to one's well being and accomplishments (Bandura, 1997). He further noted that children who entered adolescence "beset by a disabling sense of inefficacy transport[ed] their vulnerabilities to stress and dysfunction to the new environmental demands and to the pervasive bio-psychological changes they find themselves undergoing" (p. 178). This effect can carry through adolescence and into adulthood; adolescents who entered adulthood "poorly equipped with skills and plagued with doubts find many aspects of their adult life stressful and depressing" (Bandura, 1986, p. 417). Nicholls (1990, p. 18) stated that "adolescent expectations of appearing incompetent" had

negative effects on adolescent emotional well being. Phillips and Zimmerman (1990, p. 41) stated that “viewing oneself as competent to achieve valued goals has been implicated repeatedly as essential to healthy development”, was associated with better adjustment throughout the lifespan, and mediated a wide range of adaptive behaviours. Wexler (1991, p. 25) found that developing a sense of mastery from many developmental behavioural tasks in life (such as “tying shoes, reading, dating, performing sexually”) promoted feelings of competency and effectiveness. Bandura (1986) noted that older children’s cognitive abilities enabled them to attend simultaneously to multiple sources of efficacy information. This cognitive capacity increased accurate appraisals of their capabilities and limitations, which was valuable in successful functioning. More accurate appraisals promoted adolescents’ well being, as adolescents would be less likely to engage in self limiting behaviours, or experience needless failures from inaccurately low or high self efficacy. Conversely, focussing on fundamental skills deficits consequently impaired one’s sense of self worth and efficacy. Adolescence may be a good time to target self efficacy enhancement; self efficacy fluctuates as it develops throughout adolescence (Breakwell, 1992), and other adolescent characteristics may negatively affect self efficacy. Some of these characteristics included being “overly self-conscious and self-critical” (Newton, 1995, p. 83), and being ego involved (increased social comparisons and self observation of capabilities) which may undermine adolescents’ interests in and enjoyment of task performance (Nicholls, 1990). Enhanced self efficacy can generalize to these areas negatively affected by “preoccupation with personal

inadequacies" (Bandura, 1977, p. 195) and improve behaviours and performance in these areas.

Self efficacy was found to be important in school learning (Schunk, 1991). Schunk explained that self efficacy judgements were usually made when one was learning or when one believed that "personal or situational conditions may thwart performance" (p. 122), rather than routine tasks or in tasks in which one had well-developed skills. School is a setting in which students learn new tasks and apply new skills, therefore self efficacy judgements are more likely to occur. Research has also shown that, in relation to achievement, perceived competence more accurately predicted students' motivation and future academic choices more than the student's actual competence (Hackett & Betz, 1989). Proximal goals were also found to increase academic efficacy beliefs and motivation (intrinsic interest) in preadolescents (e.g., mathematics skills) (Bandura & Schunk, 1981; Schunk, 1984). Proximal goals' promotion of efficacy perceptions may be effective due to its similarity to the social comparison process, in that vicarious experiences with other students increased efficacy of task achievement (Schunk, 1984).

Research has shown that adolescents' sense of self efficacy can act as an insulator to the negative affects of traumatic events. Cheever and Hardin (1999) found that adolescents' health assessments after exposure to violent or nonviolent negative life events, or disasters were relative to the adolescents' level of social support and self efficacy. These

authors noted more and less favourable health assessments were related to higher and lower levels of self efficacy (respectively). Honig (1995) also noted that self efficacy was directly related to adolescents' perceived health status (a measure of adolescent well being) following exposure to violent life events. She concluded that self efficacy can maintain high levels of perceived health status despite the presence of violence and stress in an adolescent's life.

Self efficacy development - The pre-adolescent period

Self efficacy reflects beliefs of the success of one's action, which is part of a cohesive and integrated self (Schaffer & Blatt, 1990). Self referent cognition was initially derived during infancy from action and the observation of others' experiences. Experiences such as exercising control over the physical environment in infancy (e.g., screams will cause adults to check on the infant's needs), social environment in early childhood (Bandura, 1986), a caring relationship/ early attachment in childhood, and later (e.g., adolescent) intimate relationships contributed to self efficacious feelings and a cohesive sense of self (Schaffer & Blatt, 1990). The authors also noted that these early experiences can compromise self efficacy (e.g., lack of experience with mutually shared, reciprocal relationships). These interpersonal and expressed experiences (e.g., infants learn their gestures express their experiences to others), and these experiences' relatedness to others' experiences (e.g., caregivers understand and respond to the child's needs), play a foundational role in developing one's sense of self and self efficacy. Self efficacy

increases as infants gain more experience with self regulation through internalizing aspects of the caregiver-infant relationship. This increased self efficacy “generalizes to the feeling that one will be efficacious in other endeavours” (Schaffer & Blatt, 1990, p. 245). Physiological and/ or psychological homeostasis problems (undependable mother infant relationship, or faulty internalization), caused inefficacious feelings. Schaffer and Blatt further noted that retrospective accounts of adolescents suggested that self efficacy was related to parent - child relationships.

Peer interactions and school play a role in children's self efficacy development (Bandura, 1986). Peers serve as models of efficacious behaviour, and help the child refine self knowledge of their capabilities. Peer associations are determined along lines of common interests and values, and promote children's self efficacy in “directions of mutual interest, [and leave] other potentialities underdeveloped” (p. 416). He also found that schools permitted the child to develop cognitive competencies, knowledge and problem solving skills, and that self efficacy development can be facilitated or debilitated by the teacher's own instructional efficacy, teaching practices (e.g., lock step instructional sequencing), and classroom structures (e.g., self versus other comparative standards).

Adolescent self efficacy development - The general pattern

Infancy and childhood experiences contribute to, or prevent the development of, an adolescent's sense of efficaciousness and control over their environment. Due to changes

within (e.g., cognitive development) and outside the adolescent (e.g., new and unfamiliar task demands), self efficacy's development can be positively or negatively affected in adolescence. Breakwell (1992) declared that one's global sense of self efficacy changed during adolescence. These changes were due to new competencies being required and acquired during adolescence. Bandura (1986) explained that with the development of cognitive capacities, such as understanding one's own capabilities and skills required in different situations, self efficacy judgements increasingly supplanted external guidance formerly provided to children. He further noted that the adolescent developmental period (as all other developmental periods) brought with it new challenges to adolescent coping efficacy, such as assuming responsibility for all aspects of their lives, mastering new skills (such as intimate relationships), and career choice. Phillips and Zimmerman (1990) noted that there was a developmental change in people's competency judgements; they became more accurate from preadolescence to mid-adolescence. These changes were "associated with differing patterns of self and parent ability perceptions [of the child / adolescent], achievement expectancies, and global competence assessments" (p. 62). Children with declining or sustained underestimated self perceptions of competence accurately perceived that their parents judged their abilities less favourably, had lower expectancies of success for them, had lower generalized competence perceptions, placed more importance on social skills, and were viewed by both parents as not performing to their capacity as did their more confident peers.

Breakwell (1992, p. 39) stated that “while fluctuating in the face of new demands, [self efficacy] should on average gradually increase during the whole period of adolescence”. The author noted that self efficacy increases and psychological estrangement decreases occurred, provided the person faced, accepted, and learned how to handle transitions such as educational and occupational transitions. Anderman and Maehr (1994, p. 292) noted that there were few studies on self efficacy changes in early adolescence, and of those few, the “evidence is limited and mixed”. Breakwell’s (1992) survey noted different self efficacy patterns in mid adolescence (ages 15-17 increased in self efficacy over a three year period) and late adolescents (aged 18 - 20 remained generally stable). The author attributed these differential outcomes to assessment limitations, and the possibility that the older cohort may have reached stable estimates of their efficacy.

Influences on adolescent self efficacy

Four principle sources of efficacy (direct and vicarious experience, verbal persuasion, and physiological/ emotional arousal) affect adolescents’ self efficacy, and can be used to develop adolescents’ efficacious beliefs (see the *Interventions* section). Adolescence is a time of experimentation and engaging in new activities; requesting a date would be one example of a new adolescent behaviour/ task (Wexler, 1991), in which adolescents attempt to become efficacious. Direct experience with success in this new area can increase efficacy in date requests, which may generalize to similar other activities and situations (e.g., requests for the family car, verbal interactions with same and different sex

peers). Repeated refusals to these date requests can lower self efficacy, especially if failure occurred early in the formation of this efficacy, and was not due to lack of effort or "adverse external circumstances" (Bandura, 1982, p. 126). Adolescents could benefit from structured activities that disconfirm their misbeliefs about what they fear, and ensure that they do not have experiences that may threaten this newly developing efficacious behaviour (Bandura, 1982). School is a place where adolescents can use vicarious experiences to increase (or decrease) their self efficacy, such as observing others whom he/ she deems similar to themselves (e.g., peers) Vicarious experience seems particularly relevant to adolescents' self efficacy development as it is uniquely suited to many adolescent characteristics. These characteristics include high degree of concern with social comparison (the basis for vicarious experience - Bandura 1997), impression making and others' opinions of them (Rosenberg, 1986), a desire to exert more control over their lives (vicarious experience can increase controllability) and limited experiences on which to base personal competence evaluations (Bandura, 1982b). Thus, vicarious experience may be a particularly useful method for enhancing adolescent self efficacy. Verbal persuasion may also positively or negatively affect adolescent self efficacy. Adolescents could be subjected to forms of verbal persuasion such as pep talks from teachers (e.g., "You can do this work") and parents (e.g., "You can pass your driver's exam"). Adolescents provoke each other into trying their capabilities at "handling" drinking, smoking, etc., which may be perceived as verbal persuasion by peers to participate in various dangerous activities. An adolescent's participation (direct

experience) or observation (vicarious experience) in risky behaviours may aid him/ her develop a sense of efficacy for these behaviours (e.g., “I can drink ‘x’ number of beer”, “I can smoke without choking”, “I do not need to drink to have fun”). Schunk (1984) noted that students’ physiological/ emotional reactions such as trembling before an exam may be interpreted by himself/ herself as being incapable to perform well (e.g., adolescent experienced test anxiety, or “blanked out” on tests). An adolescent’s efficacy can also be improved through his/ her mental rehearsals of the task(s) (e.g., a sports manoeuvre, math operation, dating request, etc.).

General effects of self efficacy on behaviour, cognitions, and affective reactions

Self efficacy has been noted as one of two important expectancies that guide human behaviour (Bandura 1977, 1982). Bandura (1982b) and Marsh (1993) noted that perceived efficacy can have diverse effects on behaviour, cognition patterns, affective arousal, and motivation. First, self efficacy affected one’s behaviour through its influence on choice of activities and environmental settings (avoidance/ engagement in tasks that exceed/ meet their perceived capabilities), effort expenditure, persistence, and long term maintenance of behaviour and behaviour change (Bandura, 1997; Reeves, 1992). Adolescents’ self efficacy influences their behaviour, as many adolescents avoid situations that exceed their perceived capabilities (or in some cases, situations that even draw attention to themselves) due to concerns about making impressions and others’ opinions. Bandura (1986) noted that self efficacy promoted (if efficacious) or retarded (if

inefficacious) the development of new behaviour and skills. Schunk (1984, p. 54) stated that "teachers can promote a strong sense of efficacy among students by directly telling them they can attain their goal ("You can do this"). Second, self efficacy affected cognition patterns in that self referent concerns affected effective/ ineffective use of personal competencies. An example of effective use of personal competencies could include adolescent's self knowledge of stress management strategies, which he/ she can use to reduce autonomic arousal. Ineffective use of personal competencies, which may result from adolescents' self critical nature, led to high emotional arousal, excessive preoccupation with personal deficiencies, and perceptions that potential difficulties were more formidable than they were in reality (Bandura, 1997). Third, self efficacy influenced affective arousal, as affective arousal could be reduced / more controlled with increased perceived coping efficacy, whereas perceived inefficacy was accompanied with high anticipatory and performance arousal.

Specific effects

Self efficacy is relevant to many adolescent situations. The following section focuses on self efficacy's effects on coping, transitions (biological, educational, and social), and achievement behaviour.

A. Adolescent coping and self regulatory behaviour

Bandura (1986) noted that the adolescent developmental period brought with it new

challenges to coping efficacy. Bandura (1982, p. 129) highlighted self efficacy's importance in coping: "People who are sceptical of their ability to exercise adequate control over their actions tend to undermine their efforts in situations that tax capabilities". Thus, adolescents' low self efficacy can lead to a self fulfilling prophesy, such that beliefs in one's lack of competence to do an action lead to decreases in effort and task failure. Bandura (1982b) also explained that although efficacy judgements were important and related to action, perceived self efficacy alone would not produce desired performances; capability must also be present.

Social learning theory indicated that self efficacy was a common mechanism to behavioural change, as strengthening self efficacy altered coping behaviour (Bandura, 1982). Adolescents may experience problems with coping behaviour due to changes in the adolescents' identity (Erikson, 1968), role ambiguity and estrangement (Breakwell, 1992), educational changes (Bandura, 1997), adjustment problems (Benson et al., 1994), increased decision making and coping with others' conflicting demands (e.g., parents, school, jobs, peers) (Jacobs & Ganzel, 1993), and physical, cognitive, affective, social changes (Bandura, 1997; Dusek & Flaherty, 1981; Jacobs & Ganzel, 1993; Pope, McHayle, & Craighead, 1988). Bandura (1982, p. 122) noted that perceived self efficacy was linked to changes in coping behaviour produced by:

Different modes of influence, levels of physiological stress reactions, self regulation of refractory behaviour, resignation and despondency to failure experiences, self debilitating effects of proxy control and illusionary

inefficaciousness, achievement strivings, growth of intrinsic interest, and career pursuits.

Research studies have noted self efficacy's role in coping with situations involving fear arousal (Bandura, 1982; Bandura & Adams, 1977; Glass, Reim, & Singer, 1971; Miller, 1980; Neufeld & Thomas, 1977), adolescents' participation in risky activities such as smoking, drinking, doing drugs, driving cars, and early sexual activity (Bandura, 1997; Allen et al., 1990), and relapse into addiction (Bandura, 1982). Bandura and Adams (1977) also proposed that psychological procedures (e.g., treatments of phobias through systematic desensitization) worked by creating and strengthening expectations of personal effectiveness (through reducing physiological arousal), rather than eliminating defensive behaviours to address the underlying anxiety (the focus of standard desensitization approaches). Thus, the root of behaviour change may involve therapists' increasing clients' self efficacy, rather than the more traditional procedure of decreasing clients' defensiveness.

B. Adolescent self efficacy and transitions - Biological, educational, and social

Bandura (1997) explained that puberty (a biological "marker" of adolescence) affected one's physical prowess and social status among one's peers, and interacted with psychosocial factors to influence one's self schemata of efficacy in these domains. Research has shown that early maturation had a positive effect on boys (e.g., positive perception of increased musculature in boys), and a negative affect on girls (e.g., possible

negative influence of menstruation and weight gain on body image) (Brooks - Gunn, 1991; Petersen, 1987). A related self efficacy concern was with sexual activity. Earlier reproductive maturity resulted in increasingly earlier ages of adolescent sexual activity (Brooks-Gunn & Furstenberg, 1989). Bandura (1997) noted that the weaker the adolescent's perceived self efficacy for personal control, the more social and affective factors increased early or risky sexual behaviour. Other research has linked low self efficacy in managing one's sexual relationships to lack of contraceptive use, promotion of risky sexual behaviour, intentions to become sexually active in the next year, and having multiple sexual partners (Basen-Engquist & Parcel, 1992; Walter et al., 1993).

Educational transitions affect adolescents' self efficacy development, such as transitions from junior high to high schools (Bandura, 1997). Adolescents' face increased academic standards and uncertainties in their lives, such as changing schools/ location within the school, classmates, and/ or increased numbers of subjects/ teachers. Bandura went on to explain that adolescents may become less confident in themselves, lose some sense of personal control, become more sensitive to social evaluation, and experience a decline in self motivation during this transition. He noted that the adolescent's task was to regain their efficacy, social relationships, status, and adjust to an impersonal departmentalized school structure in this transition.

Adolescents' self efficacy is also affected by social relationships, which is relative to

changing peer groups and developing new friendships. Adolescents with high social efficacy are better at making supportive friendships. Perceived inefficacy in an area adolescents hold in high regard, such as peer social interactions (Harter, 1986), can have devastating effects on an adolescent. Social inefficacy breeds dependency, which could lead to adolescent depression (though more commonly evident in girls than boys) (Bandura, Pastorelli, Barbaranelli, & Caprara, 1999). Perceived inefficacy in social competence can also lead to a cyclic effect of avoiding peers, which in turn may increase feelings of nonacceptance by their peers. This may have serious negative effects on the adolescents' self efficacy, and more generally the self.

C. Self efficacy and adolescent achievement

Self efficacy plays an important role in adolescents' academic achievement. The following sections highlight the relevance of self efficacy to adolescent achievement, its affect on achievement, motivation, performance, and learning cognitive skills. Self efficacy's relationship to educational practices and the role of schools are also discussed.

Bandura (1984, p. 34) stated that "[p]erceived self efficacy is an important contributor to performance attainments, whatever the underlying skills might be". Pintrich and DeGroot (1990) noted that academic self efficacy was correlated to cognitive strategy use and self regulation such that improved self efficacy increased use of cognitive strategies, which heightened academic performance. Other research has shown that self efficacy affected

achievement (Multon et al., 1991; Schunk, 1984), and was a better predictor of academic performances than one's prior attainments (Pajares, 1990). Academic achievement is very relevant for adolescents, as social comparisons are commonplace in adolescent classrooms, and there are long term effects of academic achievement (e.g., career and post secondary options, scholarship eligibility). Adolescents with a strong sense of efficacy in accomplishing a task or particular school subject display strong achievement strivings, work harder, persist longer and participate more eagerly. Pajares and Johnson (1996) noted an example of adolescent self efficacy, writing self efficacy. These authors explained that writing self efficacy influenced essay writing performance and writing apprehension. Other research has noted that this pattern of inefficacious self perception led to achievement task avoidance, or readily giving up when facing difficulties (Schunk, 1981, 1984).

Self efficacy can serve as a major contributor to motivation and performance (Bandura, 1997). Task mastery through breaking a task into proximal (short) goals has been shown to increase one's self efficacy (Bandura & Schunk, 1981; Schunk, 1984). Proximal goals increased intrinsic interest through satisfaction with, and competence beliefs in, achieving the goal (Bandura & Schunk, 1981). Anderman and Maehr (1994) noted that adopting task oriented goals in schools increased early adolescents' efficacious feelings toward learning and motivation in school. This task oriented approach in the classroom included emphasis on task mastery, effort, improvement, and learning for intrinsic purposes, which

resulted in “deeper cognitive processing, such as thinking about how newly learned material relates to previous knowledge and attempting to understand complex relationships” (p. 295).

Schunk explained that self efficacy was an important variable in understanding *motivated learning* (motivation to acquire skills and knowledge) in the classroom (Schunk, 1985), and that self efficacy had diverse effects in achievement settings (Schunk, 1984). The importance of adolescents acquiring motivated learning skills lay in their use at school, which could lead to adequate performances and forming higher academic efficacy beliefs. There were various components of motivated learning in the classroom. These included student characteristics (individual aptitudes and past experiences), efficacy (e.g., “Do I have the skills?”) and outcome expectancies (e.g., “Will my hard work produce/ affect results?”), task engagement variables, and efficacy cues (Schunk, 1985). Schunk explained that task engagement variables can interact with one’s efficacy as follows: positive self efficacy in one’s ability to cognitively process (attend to, code, associate, rehearse, and monitor) information provided a sense of control over learning and strengthened self efficacy for learning; difficulty cognitively processing new material created self doubts in learning capacity. Schunk further noted that common efficacy cues were used to determine one’s efficacy within the *motivated learning* model, such as performance outcomes, attributions, situational circumstances, outcome patterns, model similarity, and persuader credibility.

Research has shown that self efficacy plays a role in classroom learning of cognitive skills (Schunk, 1985). Phillip and Zimmerman (1990) noted that declines in preadolescent and adolescents' perceived academic competence, and persistence of low perceived competence were both associated with declines in academic achievement. These authors further noted that improvements in preadolescent and adolescents' perceived competence were accompanied by improved achievement. Information via the four principle sources of efficacy (direct experience, vicarious experience, verbal persuasion, physiological experience) also contributes to adolescents' academic self efficacy. One's cognitive appraisal of direct experience with academic success/ failure, observing similar others' academic success/ failure, and persuasory teacher feedback (positive - "you can do it", " you need to use more effort"; negative - "you can't do this") could increase/ decrease efficacy on a specific academic task (respectively). Emotional symptoms such as sweating and trembling/ remaining calm during the task also contributed to the adolescent's academic sense of inefficacy/ efficacy (respectively) (Schunk, 1985). Thus, by understanding the roots of adolescent academic self efficacy, it may be possible to arrange educational practices to enhance positive efficacy beliefs.

Educational practices also affect self efficacy. Encouraging the use of task outcomes was important, as they were important contextual influences on students' self efficacy (Schunk, 1985). Schunk noted that the educational practice of providing success experiences and informing students that they were acquiring skills and knowledge would

promote students' self efficacy. The importance of self efficacy information and its effect on motivated learning seems relevant to adolescents' academic achievement, as there are generally more self efficacy appraisals when one meets new task demands (Bandura, 1982b), and new demands are regularly introduced, instructed, evaluated, and applied in schools (Schunk, 1991).

Bandura (1986, 1997) stated that schools were an agency for cultivating self efficacy in children and adolescents. A sense of intellectual efficacy developed from mastery of cognitive skills and school-related social factors such as modelling peer's cognitive skills, social comparison of performances, teachers' interpretation of students' success/ failure and its positive/ negative affect on student ability (Bandura, 1997). Furthermore, equipping students with self regulatory capabilities (e.g., skills for planning, organizing, managing instruction; regulating self motivation; enlisting resources; use of meta-cognitive skills to evaluate one's knowledge and skills adequacy) for use in education could increase self regulation efficacy, self instructional efficacy, and mastery of academic subjects. Bandura (1997) found that school practices can promote or inhibit efficacy development. Efficacy beliefs and performance attainments were promoted by diversified classrooms with less social comparisons, and a cooperative structure (others encourage and teach each other), which benefited both low and high achieving students. He also noted examples of school practices hindering efficacy, such as ability groupings and competitive grading practices. Bandura went further to explain that high and low

cognitive efficacy can positively or negatively influence other domains, such as peer relationships and social development. Examples of how a student's low cognitive efficacy influences other domains includes decreased academic inclination following failure, decreased academic efficacy, decreased popularity, increased rejection from prosocial groups, increased feelings of alienation, and increased aggressive behaviour or gravitation to less prosocial/ troublesome peer groups. Bandura determined that these results would be detrimental to adolescents' well being.

Achievement is not limited solely to academics. Self efficacy is also linked to physical/ competitive achievements, and career goal achievement. Some adolescents highly value physical competencies (e.g., desired social standing of being captain of the football team, head cheerleader, star athlete, etc.), which is one aspect from which they draw his/ her identity. Self efficacy partly mediates physical stamina in competitive situations, such that "the lower the illusorily instated self-percepts of physical efficacy, the weaker the competitive endurance in new physical activities" (Bandura, 1982, p. 142). The effect on the adolescent would be lower levels of competence in his/ her skills, which leads to lower effort in the physical task, and a self fulfilling prophecy of failure in his/ her competitions. This phenomenon seems similar to the popular culture's notion of "being psyched out". Phillips and Zimmerman (1990) discussed a related concept, illusory incompetence, which is an inaccurate underestimate of one's capabilities. These authors found that students' illusionary incompetence (high achieving students possessing low

perceived ability) declined slightly from childhood (22%) to adolescence (16% by mid adolescence) though was still a “sizable” proportion of adolescents (p. 49). Conversely, higher adolescent competency beliefs (“getting psyched up”) led to more appropriate effort put forth, and an increased likelihood of competitive success. Efficacy beliefs were directly and indirectly related to career choices and goals (Bandura, 1997). Indirectly, a low sense of efficacy in academic subjects closed the door on a variety of career options. More directly, research has revealed that efficacy beliefs influenced the range of career options seriously considered, degree of preparedness for careers, and likely vocational paths to be pursued (Bandura, 1997; Betz & Hackett, 1986; Lent & Hackett, 1987).

Benefits and drawbacks associated with high and low self efficacy

Thus far, it has been shown that efficacious and inefficacious beliefs contribute positively and negatively to one's cognition processes, emotional states, behaviours, and well being. The following section highlights the benefits of high and low self efficacy on adolescent well being. Some specific cases of low/ high efficacy, and their effects on one's cognitions, emotions, and behaviours will also be discussed.

Risks of low self efficacy

Breakwell (1992) noted that self efficacy was low when failure to succeed or inability to do an act was anticipated. Bandura's (1997) discussion of "agentic action" (how humans actively produce their performances) noted that low self efficacy negatively affected one's socio-cognitive functioning in the relevant domain in many ways. People who doubted their capabilities in specific domains avoided difficult tasks in that domain, found it harder to self motivate, reduced effort and gave up quickly when facing obstacles, had low aspirations and commitment to pursued goals, dwelt on personal deficiencies, pictured potential difficulties to be much harder than they were, and experienced adverse consequences in problem situations. These cognition processes undermined effort and analytic thinking by diverting attention from focussing on the familiar parts of the task and how to best execute activities to solve the problem, to focussing on the unfamiliar and personal deficiencies and calamities (Bandura, 1982; 1997). The author also noted that a person with low self efficacy was slower to recover their efficacy after experiencing a failure/ setback. Bandura (1986, p. 395) found that these self misgivings undermined performance and "generated a good deal of stress". The result of this person's low efficacy and its negative impact on their socio-cognitive functioning would be that: "they are prone to diagnose insufficient performance as deficient aptitude, . . . [lose] faith in their capabilities, . . . [and] fall victim to stress and depression" (Bandura, 1997, p. 39). Schunk (1985) also explained there was a relationship between successful performance and self efficacy, in that repeated failures lowered self efficacy.

Perceived inefficacy can also promote severe psychological dysfunctions (Bandura, 1986). He expanded on the idea by stating that people with perceived inefficacy “are repeatedly tormented by distressing cognitions and intrusive ruminations about possible calamities” (p. 426). Further, he noted that because behaviour was partly governed by self referent cognition, people with perceived inefficacy have lives constricted by defensive avoidance of social, vocational, and recreational activities that *might* expose them to a perceived threat.

Self efficacy can be weakened by repeated failures, or illusorily weakened through underestimation of one’s competencies (Phillips & Zimmerman, 1990). Whether the self efficacy loss is real or illusory, both can affect one’s performance motivation (Bandura, 1990), by debilitating performance and increasing vulnerability to the negative affects of failure. Bandura (1990, p. 348) stated that “[t]he more self percepts of efficacy are diminished, the greater the performance debilitation”. This weakening of self efficacy is especially important as it is cyclical. Bandura further noted that a person’s poor performance can activate a sense of incompetence, which can effect further performances in those particular contexts, and effect “choice behaviour motivation and self debilitating cognition” (p. 347). Thus, there are immediate and extended negative consequences of possessing low self efficacy.

Table 1 provides an overview of a literature review detailing associations between low

self efficacy and one's cognitions, emotions and behaviours. It should be noted that in many cases, it was not clear as to the cause and effect relationship between low self efficacy and the cited cognition, emotion and behaviour. Regardless, it would appear that low self efficacy was linked to poor well being (Bandura, 1986, 1997; Nicholls, 1990).

Table 1
Summary of low self efficacy/ inefficacious feelings in the individual*

Cognitions	Emotions	Behaviours
Increased belief in personal deficiencies	Increased anxiety and stress	Decreased effort expenditure
Increased perception of potential difficulties as more difficult than they really are	Increased/ excessive levels of fear in fear arousing situations	Decreased persistence
Increased doubt in ability to do challenging tasks	Increased/ heightened feelings of worry	Decreased levels of achievement as compared to others with equal ability
Increased suicide ideation	Increased depression	Increased ineffectual performances despite having adequate knowledge to do the task
Increased conformity of social attitudes	Increased duration of self debilitating levels of fear	Decreased effort and increased giving up when facing challenges or difficult tasks
Increased sensitivity/ greater concern for the opinions of others	Increased feelings of discouragement following failures	Decreased engagement in social activism

Table 1 (con't)

Cognitions	Emotions	Behaviours
Increased traditional beliefs of gender roles		Decreased participation in easily managed and achievable activities
Increased beliefs that failure is caused by deficient ability		Increased engagement of negative emotional behaviour (e.g., defensiveness, avoidance), rather than appropriate study behaviours
Decreased beliefs in one's worth		Increased relapse into substance abuse
Decreased/ narrowed perceptions of problem solving		Decreased/ underdeveloped/ poorly used coping skills
Increased beliefs that failure on easy activities may lead to further threatening, uncontrollable events		Increased use of self limiting behaviours (e.g., avoiding situations believed to be beyond one's capabilities)
Decreased beliefs in one's ability to achieve goals		Increased avoidance of beneficial environments and activities that cultivate personal potential
		Increased social withdrawal (social inefficacy)
		Increased participation in risky sexual activities leading to pregnancy

Table 1 (con't)

Cognitions	Emotions	Behaviours
		Decreased in use of self regulatory strategies in school (concentrating on tasks, using procedures, time management, seeking assistance, self monitoring performance)
		Increased rates of giving up on tasks, despite success being attainable through concerted effort
		Increased ineffectual behaviour, even if one has the knowledge and/ or skills to achieve the task
		Decreased attention on tasks
		Decreased participation in activities perceived as threatening (though may be objectively safe)

Sources*: Bandura, 1977, 1982, 1982b, 1986; Breakwell, 1992; Harter, 1990; Mushinski Fulk & Montgomery-Grymes, 1994; Pajares, 1996; Schunk, 1991.

Bandura (1982) noted that influence over one's behaviour was achieved through self regulatory capabilities, which required personal agency and self assurance for their effective use. Low self efficacy was associated with poor adaptations to one's environment, and negative effects on one's behaviour, cognitions and emotional reactions. It undermines and creates internal obstacles to effective performance (Bandura,

1982b, 1984), especially as related to school performance. An adolescent's overly critical view of himself/ herself may produce negative evaluations of their capabilities, leading to low self efficacy. Possessing low self efficacy (within a task specific and more general sense) (Bandura, 1984) brings with it many characteristics of a lower level of well being (as seen in Table 1). Low self efficacy makes the adolescent prone to the negative effects of negative outcomes, such as being more vulnerable to stress and dysfunction when encountering new situations in his/ her life (Bandura, 1997). Self efficacy also contributes to self esteem (another variable linked to one's well being), and a lower level of self efficacy can lead to an increased likelihood of lower esteem. Thus, adolescents' low self efficacy contributes to low states of well being.

There was one aspect of low self efficacy that could be seen as positive, although beneficial outcomes were prevented by one's feelings of inefficaciousness. Bandura (1986) noted that self doubt in one's capabilities (e.g., on a test) could motivate one to learn, but hinder his/ her effective execution of established skills learned.

Benefits of high self efficacy

A high or strong sense of self efficacy entails beliefs that one can perform an act/ complete a task to achieve a goal (Breakwell, 1992). It implies that one is skilled in adapting to one's environment, and has positive effects on one's behaviour, cognitions and emotional reactions.

Bandura (1997) explained that a strong sense of self efficacy can enhance one's socio-cognitive functioning in many ways. These included: approaching tasks as challenges (not threats) which fostered interest and involvement in the task, strong commitment to challenging goals, an increased likelihood of selecting challenging tasks, remaining task-focussed and strategic when facing challenges, increased effort and persistence in the face of obstacles, attributing failure to insufficient effort (a success orientation), recovering efficacy quickly following failures or setbacks, confident exercising of control in one's approach to potential stressors/ threats, greater achievements and accomplishments, reduced stress, and lowered vulnerability to depression (Bandura, 1977, 1982, 1986, 1997; Bandura & Adams, 1977; Schunk, 1981).

Self efficacy can be illusorily strengthened, which can affect one's performance motivation (Bandura, 1990). Illusory strengthening of self efficacy has been referred to as an overestimation of one's competencies (Phillips & Zimmerman, 1990). Illusorily self efficacy can affect behaviour; strengthening this illusion increases competitive performance and resilience. This effect is commonly used in sports to motivate players before and through their game (Bandura, 1990). Bandura (1990, 1997) explained that illusorily heightening or reducing self efficacy could be achieved through "bogus" feedback and social comparison or comparative normative standard. Manipulation of preparatory and performance efficacy is "standard procedure in athletic activities" (Bandura, 1990, p. 342). Preparatory efficacy deals with the acquisition of skills (e.g.,

learning) and degree of preparedness for task, whereas performance efficacy is the belief that the person can successfully do the required task. Coaches use a technique of lowering their players' preparatory efficacy to motivate them to practice for upcoming events ("my skills are less than my opponents"), and increasing their preparatory efficacy at the event ("I am more skilled than my opponent"). This principle is also useful in learning tasks (e.g., school), such that a reasonable (not low) level of preparatory efficacy will encourage an adolescent to invest an appropriate amount of effort into preparing for a task (e.g., a test) (Bandura, 1990). A strong sense of performance efficacy would promote the belief one will do well, and has associated benefits of increased effort and reduced stress. Adapting Bandura's (1990) explanation to adolescents, with reasonable levels of preparatory and performance efficacy (e.g., adolescent's belief that he/ she would do well and was prepared for the test) then he/ she could avoid the negative effects of self doubt, would be less impeded from using necessary skills/ knowledge to accomplish the task (e.g., receive a high/good mark on the test), and would be more likely to persist in the face of difficulties.

An important relationship exists between successful performance and self efficacy; repeated successes raised self efficacy (Schunk, 1985). Bandura (1986) explained that having a sense of efficacy could be beneficial, such it intensified and sustained efforts on difficult tasks. Schunk (1985, p. 211) also noted that students "who perceive themselves as capable of performing well expect (and usually receive) positive reactions from teachers

following successful performances, which in turn promote self efficacy". Thus, there is a positive cyclic effect to a strong sense of efficacy.

Table 2 presents results of a literature review which considered high self efficacy associations to one's cognitions, emotions, and behaviours. It should be noted that in many cases, it was not clear as to the cause and effect relationship between high self efficacy and the cited situation. Bandura (1990) stated that "a strong belief in one's self efficacy and the modifiability of the environment pays off in psychological well being and personal accomplishments" (p. 341), and has associated advantageous processes of "self challenge, commitment, motivational involvement, and non-intrusive task orientation" (p. 346). Thus, positive self efficacy would seem to promote adolescents' well being (Bandura, 1986, 1990, 1997; Nicholls, 1990).

Table 2
Summary of high self efficacy/ efficacious feelings in the individual *

Cognitions	Emotions	Behaviours
Increased causal ascriptions for failure that support success orientation (e.g., beliefs that failure is due to insufficient effort)	Decreased feelings of stress	Increased intensification of efforts following failure, obstacles or aversive experiences
Reduced transfer of learned helplessness beliefs from failure in one situation to subsequent learning tasks	Decreased anxiety	Increased setting of challenges for self
Increased beliefs in one's competence and efficaciousness	Increased feeling of serenity when approaching difficult tasks and activities	Increased persistence on challenging/ difficult tasks
Increased beliefs in self's control over aversive events in his/ her life		Increased attempts on tasks in which one believes he/ she is capable
Increased beliefs in one's ability to cope in fearful situations		Increased participation when encountering difficulties
Increased beliefs in self's capabilities following failures, setbacks, and initial self doubts		Increased self monitoring of performance and adjustment of behaviours to achieve success
Increased beliefs in one's efficacy following observations of his/ her progress		Increased use of time management strategies

Table 2 (con't)

Cognitions	Emotions	Behaviours
Decreased self doubts of one's abilities		Increased reintroduction of personal control when things do not go as planned (e.g., quit smoking, had a cigarette, then reimplemented control)
Decreased exaggerated beliefs of task difficulty		Increased use of proper procedures on achievement tasks
		Increased use of help seeking behaviours in times of need
		Increased cognitive effort and superior learning of difficult material
		Increased concentration on tasks
		Increased attention and efforts on the situation at hand
		Increased work output when encountering difficulties
		Decreased defensive behaviours in response to obstacles and aversive experiences
		Increased perseverance in the face of repeated failures
		Decreased diversion by perceived personal deficiencies
		Increased personal and social accomplishments

Table 2 (con't)

Cognitions	Emotions	Behaviours
		Increased adaptive behaviours in fearful situations
		Increased/ intensified behaviours (e.g., greater effort and persistence) which promote learning

*Sources: Bandura, 1977, 1982, 1982b, 1984; 1986, 1990; Bandura & Adams, 1977; Bandura, Adams, Hardy, & Howells, 1980; Breakwell, 1992; Mushinski Fulk & Montgomery-Grymes, 1994; Pajares, 1996; Rosenbaum & Jaffe, 1983; Schunk, 1984, 1991

This table indicates that there are many positive aspects of a strong sense of self efficacy. Bandura (1984, p. 231) essentially summarized Table 2 in the statement: “[P]eople who regard themselves as highly efficacious act, think and feel differently from those who perceive themselves as inefficacious”. Bandura (1990) further added that optimistic self appraisals can be advantageous. Schunk (1981, p. 93) highlighted one advantage of high self efficacy in that “the higher the perceived efficacy, the greater is the sustained involvement in the activities and subsequent achievement”. The author later noted that a person’s self efficacy remained high as long as one believed he/ she could maintain the level of effort needed to succeed (Schunk, 1991). Adolescents’ high self efficacy leads to believing in themselves (that they could succeed), better coping skills, success at school, and increased effort on challenging tasks; it also insulates the adolescent from the negative effects of negative outcomes, such that he/ she does not start to doubt his/ her own capacities (Bandura, 1982, 1986; Schunk 1984, 1985).

High self efficacy is not always positive, as there are risks to overly high levels of self efficacy. People with overly high self efficacy did not invest much time and effort preparing for something in which they believed they were supremely efficacious (Bandura, 1982, 1990), or was “easy” (Bandura, 1986). Gross overestimates of one’s capabilities led to undertaking tasks beyond one’s capability, experiencing difficulties, suffering needless failures, and possibly injuries (Bandura, 1982b). Therefore, accurate appraisal of one’s own capabilities was “of considerable value in successful functioning” (p. 23), and prevented the negative effects of acting on faulty self efficacy judgements. Bandura and Schunk (1981) discussed the “optimal cutoff value” and the predictiveness of levels of self efficacy for successful performance. The optimal cut off for efficacy strength varied in required skill complexity and variety. Tasks that required few skills reduced the possibility of overestimating personal capacities, thus lower self efficacy strengths predicted success. Activities which required diverse subskills and where one possessed some of these skills increased one’s assurance of success, and higher self efficacy strengths predicted success. Bandura (1982) also noted that the optimal level of efficacy was enough to create confidence in doing a task, but enough uncertainty (challenge) to prepare for the task.

Gender differences and self efficacy

Phillips and Zimmerman (1990) reported sex differences between ability and perceived competence (self efficacy), perceptions of teachers and parents expectancies and standards, measures of anxiety and psychosomatic symptoms, and non-academic perceived competence ratings. Furthermore, the authors noted that in adolescence, sex differences existed in academic perceptions of competency that were absent in elementary school: high achieving adolescent girls were more likely than adolescent boys to have lower perceived academic competencies (despite similar ability). They also reported that girls believed that math teachers, physical education teachers, and parents expected lower levels of achievement from them, and that parents set lower performance standards for them. Girls reported fewer psychosomatic symptoms, and had more positive perceptions of social competence, though had more negative perceptions of physical competence. Bandura (1990) proposed two explanations for these findings. First, "boys tend[ed] to inflate their sense of competency, and girls generally disparage[d] their capabilities" (p. 344). Second, there were parental gender-linked beliefs that school was more difficult for girls, despite evidence to the contrary (e.g., Breakwell, 1992; Phillips & Zimmerman, 1990). Breakwell also found sex differences in adolescents' self efficacy, and attributed them to females accepting traditional subordinate sex roles, and males trying to keep women in subordinate roles. Bandura (1990) noticed a similar trend; girl's self limitation of interests and career options was due to their beliefs that they lacked capabilities for traditionally male dominated careers.

Self efficacy interventions

Nicholls (1990, p. 36) noted that adolescent and adult social conditions produced ego involvement or “ a concern with how one's ability compares with that of others” and undermined adolescent interests in and enjoyment of task performance. Increased ego involvement led to decreased interests and involvement in tasks, which may result in lowered self efficacy. Therefore, efforts to provide students with proposed action plans to deal with certain situations in a positive manner, and practising such actions may enhance self efficacy and improve coping efforts in their day to day lives. One example of a proposed action plan to increase coping efficacy may be through coping programs. These programs could use direct experience (e.g., learn and practice relaxation training, techniques to deal with stress, passive/assertive/aggressive responses in role plays, decisions making processes) and vicarious experience (observing others do these activities in class, and analysing others' behaviours outside class) to develop coping skills. Schunk (1986) has shown that vicarious experiences were most effective when there was: attributional similarity (if the person sees their own attributes as similar to that of the “successful” model), perceived competence (model was seen as similar in competence to the observer, or model gradually overcame initial difficulties), observation of multiple models (e.g., in a class, observed role play), strategies were modelled (e.g., coping, relaxation), information was supplied regarding task demands (e.g., coping requires knowledge of effective communication, “good” stress, and a decision making model), and models' actions were successful. These characteristics seem very

appropriate for adolescents, as group counselling or even a regular classroom may be an effective environment to develop an adolescent's efficacy in coping with stressful problems. Attributional feedback of ability (e.g., "You are good at this"), and to a lesser extent, effort ("you're working hard") increased children's self efficacy on performance tasks, when used in combination with modelling treatments to improve persistence and accuracy on math problems (Schunk, 1982, 1983). Teacher's positive feedback regarding adolescents' developing coping skills, and teachers' (and possibly peers and parents) encouragement that they "can do these coping skills" would be an example of verbal persuasion. Physiological cues can also be used in developing coping efficacy. Information on good stress, and natural reactions to stressful events (e.g., increased pulse, energized feeling from an adrenaline rush, and tenseness) can be used to re-frame sickness or inability-to-cope beliefs (non-effective for coping) to become a belief that "stress is present; I can handle stress" (more adaptive cognitions and behaviour). Through these four methods for enhancing self efficacy (direct and vicarious experience, verbal persuasion, physiological cues), adolescents' confidence in their coping efficacy (e.g., dealing with stressors and solving problems, and in turn coping behaviours) could be enhanced.

Five generalizing self efficacy conditions were noted as particularly useful guidelines for structuring personal change programs regarding general beliefs and personal efficacy (Bandura, 1997). The five conditions in which mastery experiences produces generality

in personal efficacy are: focussing on familiar aspects/ subskills of new situations, codevelopment of skills, self regulatory skills, structuring commonalities cognitively across diverse activities, and transformational restructuring of efficacy beliefs. An example may be to focus the adolescent on familiar aspects of his/ her adequate reading skills that could be applied to enhance his/ her efficacy and skill development on mathematical word problems he/ she finds difficult. Self efficacy in areas of mathematics and science may be generalized if skills for each subject are developed at the same time (codeveloped). Inclusion of training in self regulatory skills for academic skills may also be applied to social skills, thus, efficacy in this area may be enhanced. One could structure commonalities cognitively across the activities of long distance running (the task in which one was efficacious) and playing the "mid-field" position in soccer (the inefficacious task), for example both involve much running, to develop and enhance soccer skills and efficacy with this sport. Graduation from high school due to hard work/ effort may provide a transformational restructuring of efficacy beliefs, which can be used enhance adolescents' transition to post secondary schools (one would possess an "I can handle college/ anything" efficacy belief).

Wexler (1991) noted many methods of developing feelings of competence and effectiveness. These were: successive developmental experiences (acquiring behaviours), "reframing" a failure, learning to more effectively tolerate "disturbing emotional states or blows to self cohesion", and independently coping with situations (p. 26). Wexler also

noted that developing self efficacy included a growing awareness of the availability of choices and options; options that can be increased from developing new behaviours such as learning to negotiate conflicts without becoming aggressive. Further, educational programming involving passive, aggressive, and assertive behaviours may lead to increases in self efficacy through acquiring assertive behaviours, learning to tolerate emotional states, learning not to become aggressive when faced with conflict, and becoming aware of behavioural options and choices such as passive, aggressive and assertive responses. Thus, efficacy in these areas can be increased through a 'behavioural awareness' course.

Experience with efficacious behaviours increased adolescent behaviours, thus is worth investigating as an efficacy enhancing intervention. Newton (1995, p. 82) stated that:

While the adolescent . . . is experimenting with new roles and behaviours, those behaviours which turn out to be efficacious or competent have a self reinforcing effect. The behaviour, receiving positive feedback, encourages more of the same behaviour becomes regular and systematic, it shapes the content of self-concept.

Bandura (1997) also described this self reinforcing effect, and noted that mastery experiences produced generality in personal efficacy, such as self regulatory efficacy. He noted that self regulatory skills included the following generic skills: "diagnosing task demands, constructing and evaluating courses of action, setting proximal goals to guide one's efforts, and creating self incentives to sustain engagement in taxing activities and to manage stress and debilitating intrusive cognitions" (p. 51). Further, Bandura noted that

self regulatory skills allow one to improve his/ her performance in variety of activities, apply strategies learned from one domain to another, and encourages a more general sense of efficacy in learning in other life situations. One course that teaches self regulatory skills is the Adolescence course in the Grade Nine curriculum (Casey, 1991). This course offers adolescents training and practice with effective communication, assertiveness (as opposed to passiveness or aggressiveness), decision making skills, and stress management in a 'safe'/controlled setting to develop these behaviours. Through mastery experiences in these areas, self regulatory efficacy may be enhanced, as well as a more general sense of efficacy in learning in other life situations.

Bandura (1997) explained that puberty (one characteristic of adolescence) affected one's physical prowess and social status among one's peers, and interacted with psychosocial factors to influence one's self schemata of efficacy in these domains. Previously, it was noted that the weaker the adolescent's perceived self efficacy for personal control, the more social (pressure, fear of rejection) and affective (sentiments) factors increased early or risky sexual behaviour (Bandura, 1997; Basen-Engquist & Parcel, 1992; Walter et al., 1993). Training programs to enhance self regulatory skills and sense of efficacy for personal control over sexual relationships have been effective in reducing risky sexual behaviour in adolescents (Jemmott, Jemmott, & Fong, 1992; Jemmott, Jemmott, Spears et al., 1992). Adolescents who did bear children increased their quality of life by increasing their intellectual competencies and life management efficacies (Bandura,

1997).

Research has shown that adolescents with high social efficacy are better at making supportive friendships (Bandura, 1997). Bandura et al. (1999) noted a related finding, that social inefficacy breeds despondency. This despondency can lead to adolescent depression, though more commonly in adolescent girls than boys. Efficacy for making friends may be increased by creating programming or counselling interventions (e.g., in social skills), which may contribute to social skills development and influence developing social efficacy.

Previously, it was discussed that efficacy was related to managing risky situations and adolescents' experimentation with risky activities (e.g., smoking, drinking, doing drugs, driving in cars, and early sexual activity) (Bandura, 1997). Bandura explained that adolescents increased their self efficacy by learning how to deal successfully with these situations, and best developed efficacy through guided mastery experiences providing guidance and skills needed to exercise control of risky situations. Thus, programming in sexual education, as well as behaviours (e.g., assertive behaviour) may increase adolescents' exercise of control and self regulatory efficacy in risky situations. This increased control over risky behaviour leads to more positive impacts on one's academic development, and reduced peer influence to get involved with risky behaviours (Jessor, 1986). Thus, self regulatory efficacy may be increased, and in turn, increase resistance to

drug involvement, unprotected sex, and delinquent conduct (Allen et al., 1990). Self regulation programs are available for adolescents to increase efficacy in these areas (e.g., Botvin & Dusenbery, 1992; Gilchrist & Schinke, 1985).

There may be a generic structure within which to address various problems with adolescents' self efficacy. Bandura (1982, p. 122) noted that perceived self efficacy dealt with how well one can "execute courses of action required to deal with prospective situations". Efforts to provide students with proposed action plans to deal with various situations in a positive manner, and practice with these actions (see four influences of self efficacy development), may enhance high self efficacy and improve coping efforts in their day to day lives. Programming to remediate for this area of inefficacy may use role plays to provide adolescents with actions plans (e.g., in unwanted sexual advances, problems in relationships) and practice in completing the action plan, thus increase adolescents' self efficacy. Programming to enhance self efficacy should also provide many successes at the task, as success enhanced self efficacy and occasional failures after many successes was unlikely to affect self efficacy (Schunk, 1991). Schunk went further to state that perceptions of "success achieved through great effort should raise efficacy less than if minimal effort is required" (p. 225). Thus, as self efficacy enhancement programming increased one's skills, programs should encourage ability attributions for success, which in turn will promote greater effects on self efficacy.

Bandura (1982) explained that perceived inefficacy in coping with potentially aversive events created fear/ fear arousal. Fear arousal may negatively influence one's self efficacy, and in turn, affect their well being. Social learning theory suggests a remedy; increase one's coping efficacy which could reduce fear arousal and increase participation in previously dreaded/ avoided activities. Intervention programs based on social learning theory, such as behavioural methods of increasing self knowledge of coping efficaciously (Glass et al., 1971) and cognitive methods of imparting stress inoculating cognitions, both enhanced coping efficacy to deal with fear/ fear arousal (Miller, 1980; Neufeld & Thomas, 1977). Thus, adolescents' efficaciousness can be increased through behavioural and cognitive based counselling efforts, which positively influences adolescents' state of well being.

Management of addictive behaviours is related to beliefs of self regulatory efficacy.

Bandura (1982) noted that highly efficacious adolescents reinstated self regulatory control after a "slip", whereas their inefficacious counterparts relapsed completely. Increasing an adolescent's perceived self regulatory efficacy, for example through self regulatory training, would decrease their vulnerability to substance abuse problems, increase re-implementation of self regulatory efficacy after brief loss of control (indulgences), and insulate the adolescent against marked decreases in self efficacy after a relapse / problem. Self efficacy training dealing with substance addictions seems relevant and applicable to the weight concerns of obese adolescents, who may experience similar slips in dietary

habits.

Seifert and Wheeler (1994) found that self verbalizing strategies can play an important role in enhancing pre-adolescent/adolescent student motivation, increasing self control, efficacy, and successes/ attainments. These authors noted that problem solving efficacy could be increased by training students in a self instruction programme that uses self verbalization. They also noted the power of self instruction as an instructional technique partly arose due to cognitive modelling of another person. Observing others successfully use the strategy (vicarious experience) may have created more efficacious feelings in one's use of the strategies. These authors also noted that students were taught to think in an organized and systematic manner, define tasks, and execute strategies needed to experience success, which can lead to greater self efficacy. This finding highlights the effectiveness of self regulating strategies to enhance adolescent self efficacy.

Self efficacy also plays a role in developing intrinsic interests, which influences behaviour. Bandura (1982) explained that proximal (shorter) subgoal mastery created more personal satisfaction and sense of efficacy than use of distal (larger) goals. He stated that " a sense of personal efficacy in mastering tasks is more apt to spark interest in [people] than is self perceived inefficacy in performing competently" (p. 134). Thus, use of proximal goals may be one method of enhancing motivation and self efficacy.

Bandura (1982) stated that doctors use the principle sources of efficacy (direct, vicarious, verbal persuasion, physiological state) to increase perceptions of cardiac robustness and physical efficacy in heart attack patients. Adolescents with serious medical conditions (e.g., HIV, Cancer) or even less severe afflictions (e.g., allergies) could also benefit from self efficacy information to increase their participation in activities they enjoy (e.g., socializing), rather than be limited by their medical conditions. Adapting Bandura's (1982) example of increasing cardiac robustness for an adolescent with asthma, direct experience could be gained through the treadmill exercises; vicarious experience through discussions with other adolescent asthmatics with active lives; verbal persuasion through informing them of what they physically capable of doing; and not misreading normal 'windedness' (physiological state) during exercise as indications of an impending asthma attack. Even the recovery process following myocardial reinfarction (which may extend to asthma attacks) was affected by perceived efficacy; high, intermediate and low self efficacy was associated with high, intermediate and slow recovery (respectively) (Bandura, 1982).

Conclusion

This paper addresses the issue of enhancing one aspect of adolescent self, self efficacy. Most definitions of self efficacy refer to an evaluation of one's capabilities to perform acts needed for goal attainment. Some common adolescent problems are associated with self efficacy, such as early sexual and risky behaviour, drug use and abuse, social

relationships, future/career planning, time management, stress, depression, and academic achievement. Self efficacy's effect on adolescents' cognitions, emotions, and behaviours, including specific examples of adolescent high and low self efficacy are also discussed. High self efficacy insulates the adolescent from the negative effects of negative outcomes (e.g., failure), while low self efficacy makes the adolescent more prone to these negative effects (e.g., created self doubt, reduced effort on tasks). Characteristic self efficacy changes in adolescence (fluctuating though increasing), gender differences (females generally faring worse), and intervention strategies are outlined. This paper, intended for people dealing with adolescents (e.g., parents, teachers, others), highlights self efficacy's importance in adolescents' self and well being, and methods to enhance adolescent self efficacy, thereby increasing well being.

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**Enhancement of Adolescent Well Being
Through Enhancement of Positive Attributional Style**

by

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Abstract

This paper discusses the importance of attributional style, a self evaluative aspect of the adolescent self. Attributional style is defined, its relationship to people's well being is highlighted, and a brief background of attribution theories and selected models are discussed. Changes in attributional style and developmental issues from childhood to adolescence are also discussed. The effect of attributions on adolescent well being and common problems are specifically addressed, as well as how positive attributional style are beneficial, and negative attributional styles detract from, adolescent well being. Attribution's differential benefits across gender lines are also discussed. Finally interventions to facilitate the development of a positive attributional style, including attribution retraining/ enhancement, are also discussed. This account of adolescent attributions and interventions will allow people working with adolescents (parents, educators, even other adolescents) to understand the changes and effects of attributional style, and use this information to foster adolescent well being.

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Enhancement of Adolescent Well Being Through Enhancement of Positive Attributional Style

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Attributions and their relationship to well being

One's attributions are an important aspect of the self. Attributions can be broadly defined as "how people reach a decision about what causes their own and other people's behaviour" (Antaki, 1982, p. 12). Attributions are formed by a person's beliefs and expectancies/ schemata, and these expectancies tend to perpetuate his/ her attributions in a "self stabilizing system" (Forsterling, 1990, p. 133). Other research has also noted that people habitually chose certain causal explanations for good or bad events (Peterson & Seligman, 1984). These authors noted that this habitual way of explaining things was one's explanatory or attributional style, and could be optimistic/ positive or pessimistic/ negative. Thus, one important effect of attribution is revealed; expectancies of success and failure and successful/ failed performances (respectively) reinforce and perpetuate one's expectancies and attributional style.

Attributions and attributional style have important implications for the self. Hart and Damon (1985) noted that one can accumulate understanding of one's self and others through knowledge of one's attributions. Attributions have also been noted to influence a person's affect, behaviour, attitudes, cognitions, motivation (Totman, 1982; Weiner, 1984, 1986, 1994), self concept, reactions to others, efforts to improve his/ herself, expectations of future events, attitudes toward others (Kelley & Michela, 1980), self esteem, self image (Layden, 1982; Weary, 1986; Synder & Higgins, 1986), states of learned helplessness (Peterson, 1990), and reactions to therapy (Brewin & Antaki, 1982)

in positive (positive attributional style) or negative (negative attributional style) ways. Other research has stressed the importance of people's attributions in that attributions "enhance[d] feelings of control over their environment" (Wortman, 1976, p. 23), which has been associated with well being (APA Task Force on Health Research, 1976; Bandura, 1986, 1997; Nicholls, 1990).

Attributions are related to physical and mental health. Peterson & Seligman (1987) found that negative attributional style was associated with poor physical health; people with negative attributional styles were more likely to get ill. Dua (1995) noted that maladaptive (e.g., negative) attributional style was associated to poor physical health and low emotional/ mental health, and that increases/ decreases in one's maladaptive attributional style led to corresponding decreases/ increases in future physical and psychological health (respectively). Dua and Plumer (1993) noted that maladaptive attributional style for negative events was associated with increased incidence of depression and lower levels of psychological well being. Epstein (1992) noted that attributional style served a protective function, such that a positive attributional style was more beneficial to one's physical and mental well being than a negative attributional style. Morris, Morris, and Britton (1988) reviewed studies of family members with disabilities, and found that the caregiver's negative emotional well being (e.g., depression, guilt, self blame, anxiety, coping) was related to his/ her negative attributional style.

Attributions are particularly relevant to adolescent health and well being. A review of the attributional theory and models, and the development of adolescent attributional style must be discussed in order to fully understand the effect of attributional style on the adolescents' life.

What is attribution theory?

Antaki (1982) noted that the roots of attribution theory began in the 1950's with the study of person perception; an investigation into people's thoughts about others. Theorists also started to pay more attention to people's causal ascriptions following Heider's (1958) suggestion that the key to understanding the social and physical world was in discovering the cause. This led to investigations of internal and external causes ascribed to other's observed behaviours, the discovery that people with varied levels of self esteem attributed success and failure in different ways, and the development of new therapies that trained people to make attributions similar to people with high self esteem (Layden, 1982). These findings laid the foundations for developing an attribution theory.

Attribution theory is concerned with the process individuals use to assign causes to events, and the consequences and reactions of those perceptions (Antaki, 1982; Martinko, 1995). Totman (1982, p. 46) described attribution theory as:

A set of distinctions regarding the types of explanations which are typically offered to explain past actions, and a corresponding set of hypotheses about what governs which explanation is selected in which situation and what the effect of

selecting one particular type of explanation will be on the person's mood, behaviour, and attitudes.

Attribution theory is not one unified theory per se, but "a group of complementary, but unlinked principles which guide research" (Antaki, 1982, p. 14). Other research has proposed that these principles are related. Zelen (1991) noted that these numerous attribution theories and models are tied together by a common phenomenon, the cognitive ascriptive process. Weiner (1984) explained that attribution theories are driven by the common guiding principal that individuals' search for understanding; they seek to discover why an event has occurred (the perceived causes of events). Totman (1982) noted that attribution theory rested on two assumptions: 1) that people made attributions, such as trying to explain actions, and 2) distinctions and generalizations were possible about the kinds of explanations that were typically contrived, such that ideas used to explain actions could be categorized.

Attribution models

Theories about attributions led to many working attribution models. Attribution models are important both for identifying how people process information and arrive at causal judgements of their own/ other's behaviour, and how this information processing affects people's behaviours, feelings, thought processes, and motivation (Bar-Tal, 1982; Brewin & Antaki, 1982; Weiner, 1984). Several models of attribution exist, each differing in how people ascribe causes to behaviour. Two important attribution models (which will

later be noted for their implications to adolescents) include reformulations of the learned helplessness theory within an attributional framework (e.g., Peterson, 1982; Weary, 1986), and an attributional theory of emotion (e.g., Weiner 1984).

“Learned helplessness” was first coined by Seligman and Maier (1967), and referred to learning or perception of independence between one’s behaviour and presentation and/ or withdrawal of aversive events. This learned helplessness theory became a model for the clinical syndrome depression, in which uncontrollable events led to a state of learned helplessness due to an expectation that responses and outcomes were independent. Learned helplessness theory has been recently reformulated along attributional lines to include the role of human cognitive abilities, and has found applications in human behaviour (Peterson, 1990). The reformulated theory notes when people encounter negative events, their causal explanations are along three dimensions: internal or external cause; stable or unstable cause; and global or specific cause. Peterson found that the groups at risk for learned helplessness are those who explain uncontrollable events using internal, stable, and global causes. For this group, “generalized helplessness and depression will occur, and self esteem will decrease” (Peterson, 1982, p. 100). Researchers have noted that to be at risk for depressogenic attributional style, a style which is antecedent to clinical depression, one must attribute failure to internal, stable, and global causes, and attribute success to unstable, uncontrollable, specific (Weary, 1986) and external (Peterson, 1982) causes. Weary (1986, p. 41) noted that people with

depression “blame themselves for negative outcomes but do not fully accept credit for positive outcomes”, possibly as a protective self presentation strategy of avoiding future performance demands. Helplessness and depression were expected to be circumscribed by time and space, and not involve self esteem loss for people who did not have this depressogenic attribution style (Peterson, 1982).

Bernard Weiner formulated an attributional theory of motivation which was a model for achievement motivation and emotion (Weiner, 1984, 1985). Weiner’s (1985) theory noted that people determined an outcome’s cause to be stable or unstable. This level of stability led to expectancies of success or failure that, in turn, caused affective reactions. These expectancies and affects were then “presumed to determine actions” (p. 566). Weiner’s model noted that the “self” attributed its achievement to causalities (e.g., ability, effort, task difficulty, and chance/ luck), which formed the basis of future expectancies of success and failure. The model proposed that causal explanations for success and failure could be categorized into various dimensions to determine if the attribution was a positive or negative attribution for one’s performance. Weiner et al. (1971) originally classified these four attributions into two dimensions: locus of causality and stability (also called constancy), although a third dimension was added, responsibility, which included controllability and intentionality (Weiner, 1984). Other revisions to Weiner’s attribution theory included Abramson, Seligman, and Teasdale’s (1978) addition of “globality”, which emphasized that attributions were generalizable across situations; Weiner (1984)

placed globality as part of the stability construct. Locus of causality refers to a differentiation between the internality and externality of the cause; the belief that the cause resides within or outside of him/ herself, and can be brought under one's control (Bar-Tal, 1982; Weiner, 1984). Stability refers to the degree to which the cause is anticipated to change over time. Stable causes are not expected to change over time/ are long lasting, whereas unstable causes could change "overnight" (Antaki, 1982, p. 14) or fluctuate over time. Responsibility refers to whether one possesses/ does not possess freedom of choice for an action or inaction (Weiner, 1994). Controllability is antecedent to personal responsibility, and refers to a cause under/ not under one's volitional control (Weiner, 1994). Weiner (1984) noted that intentionality was a difficult issue; most of the literature on this model does not deal with intentionality (or responsibility) and focuses on controllability. Table 1 outlines three dimensions of causality and provides examples of specific attributions used to ascribe causes for outcomes/ events in people's lives. Weiner's four attributions explaining success and failure on achievement tasks are highlighted in Table 2.

Table 1
Dimensions of causality*

General dimensions of causality	Sub-dimensions of causality	Examples of specific attributions
Locus of causality	Internal	Ability, effort, personality, mood, health
	External	Task difficulty, luck, others' interference, home conditions
Stability	Stable	Ability, task difficulty, home conditions
	Unstable	Luck, effort, mood
Controllability	Volitional control	Effort, attention, other's help
	Non-volitional control	Ability, luck, health, mood

*Sources: Antaki, 1982; Bar-Tal, 1982; Weiner, 1984; 1994; Weiner et al., 1971

Table 2
Achievement attributions and associated causality*

Attribution	Dimensions of causality		
	Locus of causality	Constancy/ Stability	Controllability
Ability	Internal	Stable/ cross situational (global)	Not under volitional control
Effort	Internal	Unstable/ temporal/ specific	Volitional control
Task Difficulty	External	Stable/ cross situational (global)	Not under volitional control
Chance/ Luck	External	Unstable/ temporal	Not under volitional control

*Sources: Weiner, 1984; 1994

Weiner (1985, p. 567) explained that most of the support for his theory of motivation came from achievement related settings, but proposed that the theory was a “general conceptual framework” with wide ranging applicability. Weiner elaborated that motivational episodes were initiated from goal attainment/ non-attainment, which led one to search for a cause which explained this goal attainment/ non-attainment. This search for causes varied, although could be described “according to the structural properties of locus, stability, and controllability” (p. 568). The author further explained that once the person’s causal attribution was determined, then the impact on the person’s expectancies, affect and action could be determined. Thus, the theory was applicable beyond achievement settings.

Development of causal attributions in adolescence

Research has found that attributional style influences one’s well being (APA Task Force on Health Research, 1976; Dua, 1995; Peterson & Seligman, 1987; Wortman, 1976). Yet to facilitate the development of adolescent’s positive attributional style and well being, one should have a clear understanding of the genesis of adolescent attributions. This understanding comes from exploring characteristic changes in adolescents as they search for causes of their successes and failures, and increasing one’s awareness of the influences on this causal search.

1. Child-adolescent transition and attributional change

Children experience many changes in the transition from childhood to adolescence, one of which is their perceptions of causality. Nicholls (1990) explained that distinctions between luck and skills, as well as ability and effort, developed in early adolescence (ages 10 to 13). He further noted that ability is "a psychological construct that depends on social comparison" (p. 33), and that the more complex notion of intelligence does not develop until age 16. Prior to adolescence, children tend to overestimate their self efficacy and ability (Stipek, 1993) and have inaccurate perceptions of causality (Weiner, 1985), which can be maladaptive (Wortman, 1976). As the ability - effort distinction forms and ability is seen as a capacity, attributions to ability become increasingly important (Schunk, 1991), while effort attributions become a "less attractive option than it was at earlier ages" (Nicholls, 1990, p. 26). Nicholls noted that effort was a less attractive option beyond childhood because less trust was placed in effort to raise one's performance to levels of relative others, and it held fewer connotations to competence. When an adolescent believed they would fail, or even if he/ she perceived task completion would take longer than most peers, he/ she was less likely to put effort forward as he/ she had done only a few short years ago in childhood. Further, Nicholls found that this could lead to adolescents' devaluation of incompetent areas, avoidance/ withdrawal from these areas, and feelings of incompetence. This pattern is evident in sports and schoolwork. Nicholls went on to explain that students' withdrawal from school work could assume more subtle forms, such as seeking a sense of accomplishment

by joining groups who resist academic attainment pressure, or engaging in other activities in which they feel competent. He also stressed the importance of adolescents finding other areas of competence, as failure to do so resulted in experiencing a state “bleaker than [their] childhood” (p. 27). Thus, adolescence is a key period for promoting positive attributions, as causal distinctions (e.g., luck versus skills, ability versus effort) are developing that reinforce adolescents’ subsequent expectancies and attributions.

2. Antecedents affecting causal achievement attributions in the classroom

School is one of the largest ongoing tasks adolescents attempt to master in their lives. Students assign causes to their mastery or non-mastery of academic achievement tasks. Bar-Tal (1982) noted that prior to assigning causes to one’s success/ failure, certain conditions existed that affected one’s perception of success/ failure, and in turn, one’s achievement related behaviour. The author noted that personal disposition and external information available to the person affected students’ developing attributional style, and were used to infer causes of their performances.

2. A) Personal disposition

An adolescent’s personal disposition can affect the development of their attributional style. Bar-Tal (1982) noted that personal disposition is composed of one’s personal tendencies (e.g., need for achievement, self esteem, and locus of control), demographic influences (e.g., sex and socio-economic status differences) and cognitive schema. He

found that people's need for achievement affects their attributions, as a high need for achievement may lead to attributions of success to ability and effort, and failure may lead to attributions of lack of effort. Conversely, a low need for achievement may lead to attributions of failure to lack of ability. Self esteem and locus of control (LOC) also affect one's developing attributional style, as low self esteem may lead to increased acceptance of personal responsibility for failure, and an internal LOC may lead to increases in the use of internal causes to explain successes and failures. Sex differences were noted to affect one's attributional style, as females tend to use more negative attributions than males (a finding more fully addressed in the "Gender Differences" section of this paper). One's socio-economic status (SES) also affects one's attributional style, as people with low SES tend to attribute failure to stable causes, whereas people with a higher SES tend to view failures as due to internal, unstable causes. Bar-Tal (1982) noted that causal schemata, one's concept as to the causes that produced specific events, were formed from past experience and affected how one develops attributional style. Markus, Cross, and Wurf (1990) explained that one's attributional style could, in turn, affect one's self schema. Markus et al. found that internal and stable attributions for one's performances were needed to develop a self schema for that ability, whereas external attributions may lead to non-development of a self structure concerning that ability. These findings reveal that an adolescent's personal disposition affects how he/she ascribes causes to various successes and failures.

2. B) External information

Bar-Tal (1982) detailed five areas of external information that helped students infer causes of their performances: his/ her own performance, other's performance, the constraints and nature of his/ her achievement, parent's/ other's influence, and the teacher's influence. He explained that consistency of one's performance influences the attributions he/ she uses to explain success/ failure; performance that is consistent with previous and past performances may lead to more stable attributions (e.g., ability, task difficulty), while inconsistent performances may lead to more unstable attributions (e.g., effort, luck). Others' performance on a task also influences the attributions he/ she uses to explain success/ failure. Comparison of other's performances as consistent to his/ her own may lead to more external attributions (e.g., task difficulty), whereas inconsistent performance may lead to more internal (e.g., ability, effort) or specific external (e.g., luck) attributions. The nature of task and task constraints also affects a person's attributions and achievement. Bar-Tal further noted that tasks completed with only brief effort led to attributions of lack of effort if the task was failed, or easy task/ luck attributions if the person succeeded on the task. Conversely, if a person invested a lot of time into a task, this led to attributions of bad luck/ task difficulty (if failed) or effort (if successful). Bar-Tal also explained that significant others, such as parents and teachers, affected one's attributions by implicitly or explicitly providing him/ her with causes as to why his/ her outcomes were achieved. Parents influence their children's achievement attributions by implicitly or explicitly communicating their attributions for their

children's performance to the children (e.g., through parent reactions). Teachers influence their students' attributions by directing them to adaptive, positive attributions, which can affect students' future performances. Bar-Tal went further to explain that teachers' expectations of a student's performance also affect their students' future performance. For example, teachers may communicate their stable ("will do good work"), unstable -controllable ("can do good work if wants to"), or unstable-uncontrollable ("unpredictable future performance") expectations of a student's performance to the student.

Bar-Tal (1982) explained that other teacher-related attributional antecedents, such as teacher instructions, behaviours toward students, administered reinforcements, and references to causality, affected students' causal attributions and achievement behaviour. He noted that a teacher's instructions highlighting ability or ability and effort as requirements for successful performance differentially affected groups with low and high needs to achieve, and predicted effort expenditure and successes. The group with a high need to achieve did well on tasks when ability and effort were stressed (high ability/ effort attribution), and worse when they were led to believe something (e.g., a placebo) would interfere with their performance; the group with a low need to achieve had an opposite reaction. Teacher reinforcements, such as competitive reward schedules and verbal feedback, also affect student's performance on achievement tasks. Competitive reward schedules increase luck attributions for success and self derogatory attributions with

failure (low ability). Meyer et al. (1979) found verbal feedback affected one's attributions, in that praise or no reaction on a task perceived as easy led to low ability attributions, whereas criticism or neutral reaction on a task perceived to be hard led to high ability attributions. Bar-Tal (1982) also noted that teachers' references to causality affected students' causal attributions and achievement behaviour. This result was confirmed by Dweck (1975) who showed that references to effort attributions for failure can increase a student's adaptive attribution style. Thus, it appears that antecedent conditions, such as personal dispositions and external information available to the student, can positively or negatively influence his/ her causal perception of success and failure and the development of positive achievement related behaviours.

The importance of attributional style in adolescence

Adolescence is a time of rapid development (Jacobs & Ganzel, 1993), fluctuating self concept and self esteem (Breakwell, 1992; Nicholls, 1990; Rosenberg, 1979), and increasingly critical views of the self (Newton, 1995; Rosenberg, 1985), which may predispose some adolescents to form negative self attributions (e.g., failure as due to lack of ability), and negatively effect his/ her well being (Battle, 1987; Deci & Ryan, 1995, Mruk, 1995). Adolescents' cognitive development is another characteristic of adolescence that makes it an important period for attributional style formation. Early adolescents develop the cognitive capacity to more accurately differentiate between ability/ effort and skill/ luck attributions (Nicholls, 1990). This is important, as

adolescents can more accurately attribute causality to their success and failures, which leads to the development of positive or negative attributional styles. The adolescent's early stage of attributional style development, and the fact that attributions are malleable (Peterson & Seligman, 1987), may make it easier to retrain these initially developing negative attributions into more positive and adaptive attributions. Thus, characteristics of adolescence place adolescents more at risk for negative attributional styles and lower or fluctuating states of well being, yet also make it an opportune time to promote positive attributional style.

Attributional style also can play an important role in adolescents' lives. Research has shown that positive attributional style contributes to adolescents' more positive states of well being (APA Task Force on Health Research, 1976; Bandura, 1986, 1997; Epstein, 1992; Nicholls, 1990), self image (Layden, 1982), and self esteem (Layden, 1982; Weary, 1986; Synder & Higgins, 1986). Adolescents' health, health behaviours, and mental health have also been linked to their attributional style and well being. Uzark, Becker, Dielman, and Rocchini (1989) noted that attributional style was related to obese children and adolescents' compliance and weight loss within weight control programs. Kuttner, Delamater, and Santiago (1991) noted that management of chronic/ long term medical conditions was also associated with attributional style, and found that diabetic adolescents with negative attributional style experienced depression and ongoing problems with metabolic control. Research has also shown that adolescents in negative

situations (e.g., unemployed) with negative attributional styles suffered lower states of mental health and psychological well being (Ostell & Divers, 1988; Winefeild, Tiggerman, & Smith, 1988).

Attributional style has been linked to common adolescent problems and concerns such as coping efforts/ success (Rosenbaum, 1990; Synder & Higgins, 1986), feelings of guilt and self esteem (Weiner, 1984; 1985), depression (Layden, 1982), teacher - pupil interactions (Bar-Tal, 1982), and academic achievement (Weiner, 1985). Academic achievement plays an especially major role in adolescents' planning for their adult life (e.g., career, post secondary admissions, scholarship eligibility), and problems in this area could have a serious negative impact on the adolescent. Therefore, it is important that people dealing with adolescents know more about attributional style due to its association with adolescents' problems and influence on their well being

The importance of positive attributional style is also highlighted in findings that one's attributional style reinforces itself (Forsterling, 1990), and as such can have a beneficial or detrimental effect on many areas of an adolescent's life. Weiner (1984, p. 25) alluded to this reinforcing effect when he explained the role of attributions and expectancies in one's life:

If success (or failure) has been attained and if the conditions or causes of that outcome are perceived as remaining unchanged, then success (or failure) will be anticipated again with a reasonable degree of certainty. But if the conditions or

the causes are subject to change, then there is reasonable doubt of the repetition of the previous outcome.

Thus, if success or failure was perceived as stable, then it would encourage more success/failure, respectively. This concept is important, as it highlights adolescents' need to develop positive attributional styles to prevent or reverse maladaptive negative attributional styles (e.g., expectancies of failure). For example, if an adolescent attributed failure at a task (e.g., playing soccer) to stable internal and uncontrollable causes (e.g., one's lack of ability), then he/ she is more likely to avoid this task, or downplay its importance to the self. Thus, the adolescent may deny him/ herself the chance to participate and enjoy various activities. These self limiting behaviours (e.g., avoidance) could negatively affect an adolescent's well being, especially if they were to become routine when new or challenging tasks were encountered. Conversely, adolescents with a positive attributional style attributed failure to unstable, external and/ or controllable causes (e.g., effort), which promoted more adaptive behaviours (e.g., seeking assistance, practising one's soccer skills, trying new experiences).

Adolescents typically spend a large portion of their day in school. The importance of one's attributional style within these educational achievement settings has been noted, as certain attributional patterns were more adaptive and desirable for educational achievement (Bar-Tal, 1982). Early studies of achievement-related learned helplessness in school children (Deiner & Dweck, 1978; Dweck & Reppucci, 1973) found that

children's responses to negative feedback (e.g., task failure) depended on attributions of the failure's cause. These studies noted that individuals in the "helpless" group placed less emphasis on effort as leading to success, attributed failure to his/ her ability, and decreased effort put into the task. The "mastery" group attributed failure to lack of effort and more effort was exerted to solve the task. Weiner (1984) also noted that certain attributions affected one's behaviours and cognitions favourably (e.g., the adolescent attributes academic success to ability and failure to lack of effort) whereas other attributions were less favourable (e.g., the adolescent attributes academic success to external factors (luck) and failure to lack of ability). This mastery orientation to problem solving, which involves external, unstable, and/ or controllable attributions for failure and internal, stable, and/ or uncontrollable attributions for success (Bar-Tal, 1982), is more conducive to educational achievement. This mastery orientation has been referred to as highly motivating and adaptive (Meece, 1997; Weiner, 1984, respectively), and has been associated with many benefits such as children's perception of failure as a challenge (Boggiano & Katz, 1991), persistence in the face of failure, increased attempts and intensity on performed achievement tasks (Bar-Tal, 1982), increased/ perpetuated subsequent expectations for success, perceptions that negative outcomes can be changed as he/ she may be successful on further attempts (Mushinski Fulk & Montgomery-Grymes, 1994), enhanced persistence toward a goal, and augmented performance (Weiner, 1984). Bar-Tal (1982, p. 190) explained that students who attributed success to external causes and failures to internal, stable, and/ or uncontrollable causes tended to

display “maladaptive, helpless achievement behaviour”, which did not facilitate educational achievement. Researchers have noted the debilitating effects of a negative (e.g., helpless) attributional style, such as diminished effort and subsequent performance (Boggiano & Katz, 1991), lack of motivation to persist at task, expectancies of failure due to the cause of the failure being within oneself (Weiner, 1984), perceptions of lack of control over success and failure (Mushinski Fulk & Montgomery-Grymes, 1994), damaged self worth (Covington & Beery, 1976; Nicholls, 1978), and task avoidance (Bartol, 1982). Thus, attributional style is relevant to adolescents’ educational achievement, as positive attributional style is more desirable, adaptive and conducive to achievement.

Individual and social achievement are two other achievement areas important for adolescence. Weiner (1984) explained that attribution patterns for individual and social achievement strivings were linked to treatment by others and one’s performance. He further explained that punishment from others led to the perception that social/ individual failure was due to lack of effort, and resulted in performance increments. Lack of punishment led to the perception that failure was due to lack of ability/ aptitude and led to performance decrements in social/ individual achievement situations. Thus, attributional style is relevant to adolescents’ achievement in a broader sense, with positive attributional style being more conducive to individual and social achievement.

Attributional style is also relevant to depression, a commonly reported emotional state in

adolescents (Gans, 1990; Westera & Bennett, 1990). Research has noted specific attribution patterns in depressed people (Peterson, 1982, 1990; Synder & Higgins, 1986; Weary, 1986), non-depressed people (Synder & Higgins, 1986), and attributional styles preceding decreases in depression (Peterson, Luborsky, & Seligman, 1983). Depressed adolescents attribute failure to internal, stable and/ or global causes, and attribute success to unstable, uncontrollable, specific and external causes for success. The non-depressed adolescents' attributional style includes external, unstable, specific attributions for failure. Peterson et al. (1983) noted that adoption of this attributional style preceded decreases in depression. Thus, attributional style is an important psychological variable in depression, and could be used for the identification and treatment of depressed adolescents.

Benefits of positive attributions

An adolescent's positive attributional style can have many beneficial effects on his/ her life. Layden (1982, p. 64) alluded to positive attributional style in her statement that people would like to believe that "our successes are our own and that our failures are not". There are positive ways to attribute one's successes and failures on tasks, and more generally to positive and negative events, experienced in one's life. A positive way to attribute *success* in an achievement task is to see the cause of one's success as due to internal, stable, and global causes (Bar-Tal, 1982; Boggiano & Katz, 1991; Jaspars, Fincham, & Hewstone, 1983; Markus et al., 1990; Martinko, 1995; Weiner, 1984). Research has noted that attributions of success to internal, stable, and global factors are

beneficial, as the person perceives he/ she has the ability to accomplish the tasks (Jaspars et al., 1983), forms higher (positive) future expectancies of success and is highly motivated (Weiner, 1984), raises or maintains a positive perception of him/ herself (Layden, 1982), maintains/ protects his/ her self esteem (Layden, 1982; Weary, 1986; Snyder & Higgins, 1986), believes he/ she can use successful strategies and persistence to succeed at tasks (Seifert & Wheeler, 1994), and expresses more positive affect (Martinko, 1995). Markus et al. (1990) found this attributional style beneficial, as successful performance in a valued area increased the probability of developing positive self schema in that domain. Wylie (1989) also noted that positive success attributions were beneficial due to a positive correlation between ability and effort attributions of success and positive self concept.

Layden (1982) noted that claiming credit for success, but not for failure was a common human behaviour. Research has shown that a positive way to assign causes to one's failures includes the perception that his/ her failure is due to external, unstable (variable), specific, and controllable causes (Forsterling, 1990; Martinko, 1995). This *failure* attribution is positive as it enables the person (e.g., adolescent) to believe that the task is dependent on will and there is "a possibility of modifying the outcome in the future" (Bar-Tal, 1982, p. 179), fosters explanations of failure as due to the lack of effort, unsuccessful strategy use or lack of persistence (Jaspars et al., 1983; Seifert & Wheeler, 1994, respectively), fosters beliefs that the outcome may be different the next time

(Weiner, 1984), and allows expectations of eventual success to form (e.g., through effort) (Bar-Tal, 1982; Weiner, 1984). Attributions of failure to external, varied (unstable) forces does not negatively effect the person's perceived ability to complete tasks, rather it encourages persistence toward the goal and increased performance (Weiner, 1984), facilitates active coping efforts (Rosenbaum, 1990), and leads to higher levels of self esteem (Synder & Higgins, 1986). Weiner (1984) detailed some examples of people's positive attributions of negative events: academic failure would be attributed to bad luck or lack of effort; social rejection would be due to temporary illness; job failure would be due to changing sales territories; rape would be attributed to mistaken behaviour; rejection to publish a scientific paper would be due to choice of reviewers; and criminal behaviour would be attributed to temporary economic plight. Adolescents are more likely to display intensity, quality and persistent behaviour in situations, and goal directed activity with these positive attributions of success and failure.

Maintenance of a positive attributional style allows people to make self serving attributions. Markus et al. (1990) noted that self serving attributions were defences against threats to one's self structure. These authors noted that failure or disappointment in an area to which one aspires can be made less debilitating in many ways. The failure could be perceived as "due to external, unstable, and or uncontrollable circumstances" (p. 220). Alternatively, one can make downward comparisons (comparing him/ herself with others in worse situations), deny or ignore the threat's importance, or engage in

affirmations of ability in other important domains.

The effect of positive failure attributions is alternately referred to in the literature as self serving and excuse making. An individual using external, unstable and specific causes to explain failure is using “the classic excuse making pattern” (Synder & Higgins, 1986, p. 70). Synder and Higgins explain that excuse making occurs in anticipation of, or after, a bad outcome for which the person appears responsible. Excuse making allows one to move the negative personal outcome (an action that falls below one’s typical standards) “from the threatening internal locus [of causality] to a relatively less threatening external locus” (p. 57). Thus, the person avoids dispositional attributions for negative outcomes (a negative attribution) by making the failure less internal, threatening, and central to the person. For example, the attribution “my failure was my fault” changed to “my failure was due to someone/ thing else”, which is less threatening. The authors further explained that excuse making enables a person to elicit more favourable reactions from others following a failure/ negative outcome. Thus, people tend to explain negative outcomes with an uncontrollable cause (an excuse) as it evokes pity from others, rather than use a controllable cause that evokes anger from others. Synder and Higgins went on to describe two main benefits of excuse making. They noted that excuse making allows one to maintain a positive self image (protect self esteem) and a personal sense of control. Further, they extrapolated long range benefits from excuses or excuse-related attributional styles, such as enhanced coping and “consequent relative immunity to stress” (p. 107).

Therefore, excuse making, which has some limited associated negative aspects, serves a function of insulating people (e.g., adolescents) from internal attributions of negative outcomes, and allows people to keep one's "[self] image and sense of control intact" (p. 109).

Weiner (1984, p. 31) noted that causal dimensions "are quite prevalent in our culture", and play an important role as it affects our cognitions (created/ maintained expectancies), motivates our behaviour (increased or decreased performance), and influences our experienced affect. Table 3 presents the results of a literature review detailing associations between positive attributions and one's cognitions, emotions and behaviours. A brief definition of a positive attribution includes attributing success to the self, and failure to external or controllable factors. It should be noted that in some cases, it was not clear as to the cause and effect relationship between positive attributions and the cited cognitions, emotions, and behaviours. Regardless, positive attributions seem linked to positive states of well being (APA Task Force on Health Research, 1976; Bandura, 1986, 1997; Epstein, 1992; Nicholls, 1990).

Table 3
Summary of the affect of positive attributions on an individual*

Cognitions	Emotions	Behaviours
Increased beliefs that one will be successful on future tasks	Increased or maintained self esteem	Increased task persistence
Increased beliefs in one's competence to accomplish the task(s)	Increased feelings of happiness	Increased academic achievement
Increased perceptions of one's personal effectiveness	Increased feelings of self satisfaction	Increased long lasting behaviour change
Increased/ enhanced development of positive self schema	Increased feelings of gratitude in response to received assistance	Increased coping behaviours
Increased or maintained positive self perception	Increased feelings of hopefulness	
Increased beliefs in success as due to ability and effort, especially when one has a high need for achievement	Increased feelings of relaxation following long term effort	
Increased beliefs in failure as due to lack of effort, especially when one has a high need for achievement	Increased positive feelings (e.g., proud) following one's accomplishments	

*Sources: Bar-Tal, 1982; Brewin & Antaki, 1982; Forsterling, 1990; Layden, 1982; Markus et al., 1990; Rosenbaum, 1990; Weiner, Russell, & Lerman, 1979; Weiner, 1984; 1985, 1990.

Table 3 highlights the fact that adolescents possessing positive attributions (success as due to global, internal, stable causes, and failure as due to specific, external, unstable, and controllable causes) would be adaptive in their environments, and that this attributional style contributes to adolescents' well being (e.g., more likely to possess lower levels of

depression, and higher levels of achievement, happiness, and positive self perception). These positive attributions have an insulating effect when adolescents face negative outcomes (e.g., failure), as it prevents them from making poor ability attributions for the negative outcome, prevents the adolescent from dwelling on the failure as they believe they will succeed the next time, allows him/ her to maintain or increase their self image and sense of control over their surroundings, and facilitates coping efforts (Rosenbaum, 1990; Synder & Higgins, 1986; Weiner, 1984). The positive attributional style is also beneficial when the adolescent faces positive outcomes (e.g., success), as this success breeds more success (reinforces success and success expectancies), increases positive self perceptions, allows them to claim responsibility for the success, and motivates them to work hard in the face of adversity (Forsterling, 1990; Layden, 1982; Weiner, 1984). Thus, a positive attributional style can enhance adolescents' well being.

Risks of negative attributions

Martinko (1995) noted that people with optimistic (positive) attributional styles had more beneficial cognitions, emotions and behaviours than their pessimistic (negative) counterparts. Thus, negative attributions of successes/ positive outcomes and failures/ negative outcomes can seriously affect the adolescent's well being. Research has shown that a negative way to attribute *success* in an achievement task is to ascribe successes to unstable, external, and uncontrollable causes (Jaspars et al., 1983; Fosterling, 1990; Weiner, 1984). This negative attributional style leads to expectations that success is not

likely to reoccur, and does not motivate students to achieve because the success/ positive outcome is perceived to be caused by others, or variable events beyond their control (e.g., good luck, and an easy task).

Failure can also be attributed in a way that is not beneficial. Research has shown that attributing *failure* on an achievement task to global, stable, internal, and/ or uncontrollable causes is a negative way to interpret task failure, or a negative attributional style (Antaki, 1982; Bar-Tal, 1982; Forsterling, 1990; Rosenbaum, 1990). Failure can be damaging if continually attributed to internal, stable factors. Research has shown that a student who internalizes failure consistently perceives that he/ she cannot change and failure is imminent, has lower motivation to perform with intensity and complete tasks, is more at risk for helplessness, decreases his/ her future expectancies of success, increases his/ her negative expectancies (a negative expectancy shift), and is correlated to negative self concept (Antaki, 1982; Bar-Tal, 1982; Jaspars et al., 1983; Layden 1982; Rosenbaum, 1990; Weiner, 1984; Wylie, 1989). This internalized failure leads to negative values and self schema within the domain, and the formation of negative views of one's abilities, at least in a particular skill/ task (Markus et al., 1990). Thus, even if one succeeds at a task, his/ her expectations to fail lead him/ her to attribute the success to an unstable attribution (e.g., chance) (Forsterling, 1990). Weiner (1984) noted some examples of people's negative attributions of negative events: academic failure would be attributed to lack of ability; occupational failure would be due to poor personality; social

rejection would be due to physical unattractiveness; rape would be attributed to character faults; failure to publish one's scientific paper would be attributed to unsound research; and criminal behaviour would be due to some genetic dysfunction. Synder and Higgins (1986) noted that an individual making these internal, stable and global attributions would be using the "classic" depressive pattern of attributions for negative events, thus, would be more susceptible to depression.

Table 4 provides the results of a literature review detailing associations between negative attributions and one's cognitions, emotions and behaviours. Briefly stated, a negative attribution involves attributing failure to the self, and success to external or uncontrollable factors. It should be noted that in some cases, it was not clear as to the cause and effect relationship between negative attributions and the cited cognitions, emotions and behaviours. Regardless, negative attributions seemed linked to lower states of well being (APA Task Force on Health Research, 1976; Bandura, 1986, 1997; Dua, 1995; Dua and Plumer, 1993; Kuttner et al., 1991; Nicholls, 1990; Peterson & Seligman, 1987; Winefeild et al., 1988).

Table 4
Summary of the affect of negative attributions on an individual*

Cognitions	Emotions	Behaviours
Increased beliefs that one will fail on future tasks	Decreased/ negative affect on self esteem	Decreased perseverance at tasks
Increased development of negative self schema around an attribute	Increased feelings of helplessness and depression	Decreased motivation to achieve
Increased belief that failure is due to lack of ability, especially when one has a low need for achievement	Increased feelings of resignation	Decreased coping behaviours
Increased beliefs that persisting will not produce desired results	Increased feelings of shame	Increased learned helplessness behaviours (e.g., giving up)
Increased beliefs that negative outcomes are caused by internal factors (e.g., lack of skills/ ability, negative personality traits)	Increased feelings of humiliation	Increased dysfunctional behaviour (e.g., insomnia, neurosis, stuttering)
Increased beliefs that positive outcomes are caused by external factors (e.g., luck)	Increased feelings of anger	Decreased performance
	Increased feelings of surprise and frustration	Decreased levels of academic achievement
	Increased feelings of hopelessness	
	Increased feelings of pity	
	Increased feelings of guilt	
	Increased anxiety	

Sources*: Antaki, 1982; Bar-Tal 1982; Jaspars et al., 1983; Layden, 1982; Markus et al., 1990; Peterson, 1982; Rosenbaum, 1990; Storms & McCaul, 1976; Weiner, 1984, 1985, 1990; Weiner, Russell, & Lerman, 1979; Wortman, 1976; Wylie 1989.

Research has shown that students' attributions affect their achievement related behaviour (Bar-Tal, 1982). Thus, a student with a negative attributional style would possess more negative achievement related behaviours (e.g., in Table 4), as the task's results are perceived to be independent of effort. Negative attributional styles are more likely to develop in adolescents with negative antecedents such as personal disposition (e.g., low need for achievement, low self esteem, and low SES), negative perceptions of external information (e.g., unstable-uncontrollable attributions for success and stable attributions for failure), who make disparaging self comparisons (e.g., adolescent puts forth the same or more effort than his/ her peers, yet only he/ she fails the task), and who experience negative parent and teacher feedback on his/ her performance (e.g., failed due to lack of ability). A prognosis for this adolescent's positive state of well being would be quite low indeed!

These negative attributions fails to protect the adolescent from the negative effects of negative outcomes (e.g., failure), as it does not motivate the adolescent to succeed, leads to fatalistic beliefs that he/ she cannot control their successes and that failure is imminent, increases his/ her maladaptive/ nonproductive responses to difficult tasks (e.g., depression, anxiety, guilt), makes him/ her prone to blame himself/ herself for failure, and

breeds despondency (Fosterling, 1990; Jaspars et al., 1983; Morris et al., 1988; Weary, 1986; Weiner, 1984). Thus, the adolescents' negative attributional style decreases their states of well being.

It should be noted that negative schemas can still serve two positive purposes, in that negative schemas can be used as an impetus to change and overcome an incompetence, and as an indicator of self concept change (Markus et al., 1990).

Gender differences in attribution styles

It appears that males and females have tendencies to form different attributional styles due to external forces such as stereotypes. Stereotypes of male competence and female incompetence are known to influence one's attributions, and can lead to self stereotyping and further effects on one's achievement and self concept (Jaspars et al., 1983). Research has shown that sex differences exist in adult's (Deaux, 1976) and children's (Bar-Tal, 1982) attributions of success and failure. Men tend to attribute task success (e.g., anagram tasks) to ability, whereas women tend to attribute failure due to ability and have lower performance expectations (Deaux, 1976). Bar-Tal (1982) noted this pattern in schools as females were more likely to use external attributions for success, and rate their ability lower than males. He noted that teachers may be influenced by gender stereotypes, and that teacher feedback on students' work may differ by sex. Girls receive more positive references to nonintellectual aspects of their work, fewer positive references to

intellectual aspects of their work, and are less likely to have references made to lack of motivation when informed of task failures than boys. This teacher-pupil interaction pattern leads girls to “place less emphasis . . . on effort as a cause of failure and more [attributions of] failure to a lack of ability” (p. 185). Teachers’ interactions with boys differ, with more references to effort as the cause of failure and more appeals to their intellectual work. These different male and female feedback patterns result in more positive success attributions for males, and more negative failure attributions for females. Jaspars et al. (1983) highlighted the importance of this finding, as this negative attributional style for females helps maintain a low concept of personal ability (lower self concept).

Gender differences also exist in adolescents’ perceptions of personal success and failure, such as his/ her control over their health and body weight. Scott (1997, p. 387-388) stated that many public education programs give the message that “slim is good/ healthy and fat is bad/ unhealthy, with a corollary that by means of exercise and diet, people control their body size and general health [and that] excess body weight is a symbol of personal failure”. She found that women used negative attributional styles to account for being fat (personally responsible) and trim (not personally responsible). She also found that men used positive attributions of responsibility for trimness, and regarded being fat as “beyond their capability to influence” (p. 388). These studies into gender differences in attributional style reveal that external forces (e.g., sex stereotypes) create a tendency for

females to possess negative attributional styles (at least for academic achievement and body size/ weight), and men may tend form more positive attributional styles.

Attribution Interventions

It has been previously noted that the development of a positive attributional style was an adaptive, positive way to interpret events, whereas a negative attributional style was maladaptive, negative interpretation of events. Knowledge of how people interpret and label their experiences can be used to facilitate development of a positive attributional style. Early research found that an internal state (e.g., arousal) could be interpreted differently (e.g., euphoria or anger) depending on one's situations and surroundings (Schachter & Singer, 1962). Thus, attributions of internal states are mediated by one's surroundings, producing positive (e.g., euphoria) and negative experiences (e.g., anger). This result indicates that the same event/ experience can be attributed in different ways and can be altered depending on the surroundings/ information available to the person. Knowledge of how adolescents attribute cause to a success/ failure can be useful in getting him/ her to reinterpret their success/ failure experiences in a positive way through attributional retraining.

Therapists originally attempted to retrain people's attributions to give people with low self esteem attributions similar to people with high self esteem (Layden, 1982). These therapists attempted to change their client's belief structure about the cause of an event

(Layden, 1982) by having them search for internal, stable, and global causes for good events and external, unstable and specific causes for negative outcomes (Peterson, 1982). Attributional retraining can be used as an intervention strategy to change adolescents' maladaptive negative attributions of success and failure to more adaptive, positive attributions (e.g., Chapin & Dyck, 1976; Craske, 1988; Dweck, 1975; Fowler & Peterson, 1981). This attributional retraining process involves identifying the task to which the adolescent negatively attributes success (success as due to unstable, external, uncontrollable causes) and failure (failure as due to global, stable, internal causes). Next, attributional retraining aims to change the negative success and failure attributions to the converse; *failure* would be attributed to unstable, external, uncontrollable causes, and *success* would be due to global, stable, internal causes. Retraining one's success/ failure attributions to positive, adaptive attributional styles operates on the premise that the client may not have access to important information in their original attribution, and/ or that the person's interpretation of the data is less accurate than the therapist's (Brewin & Antaki, 1982). Thus, successes previously attributed to good luck or easy tasks may be reinterpreted as due to a combination of ability and effort (Layden, 1982). Attribution retraining has been proven effective in increasing self esteem (Layden, 1982), maintaining long term behaviour change (Brewin & Antaki, 1982), increasing academic achievement (Anderson, 1983; Chapin & Dyck, 1976; Dweck, 1975; Wilson & Linville, 1985), and influencing one's attributions regarding specific events (Dweck, 1975). Aveller's study (as cited in Layden, 1982) also noted that attribution retraining can

influence one's attributions of more general events (e.g., produce a change in helpless attributions across many situations). Layden (1982, p. 79) highlighted the importance of specific and more general attributional changes, in that her statement that "broad attributional changes will cause broad cognitive changes in the attitude toward the self, but specific attributional change is necessary for specific behavioural problems". Forsterling (1990) reviewed a number of attributional retraining studies, and concluded that the training influenced a significant amount of behaviours and cognitions in the expected directions. Therefore, attributional retraining is an effective tool to promote the development of positive, adaptive attributional styles in adolescents.

The following table (Table 5) includes examples of retraining negative attributional styles to positive attributional styles for success and failure in various adolescent situations. These situations include the adolescent encountering a specific type of mathematics problem (e.g., division), participating in an endurance run (the "Canada Fitness Run") in physical education class, making a date request, and making requests to borrow the family car. These examples of shifts from negative to positive attributional style illustrate that positive attributional style can contribute to a more positive state of adolescent well being.

Table 5
Samples of adolescents' shift from negative to positive attributions of success and failure

Situation	Performance on the task	Negative attribution - Result attributed to. . .	Positive attribution - Result now attributed to . . .
Division problem	Success	Luck or easy problem	Ability and/ or effort
	Failure	Lack of ability to do mathematics problems	Difficult problem or poor use of strategy
Fitness run	Success	Luck, or others' encouragement	Practice has improved his/ her performance, or he/ she is good at running/ sports
	Failure	Personal weakness in sports	Poor weather, or incorrect shoes
Date request	Success	Other person's friends pressured him/ her to double date, or he/ she dates everyone	Other person believes the requester is an interesting, attractive, and/ or nice person
	Failure	Requester was deemed ugly	Other person was not his/ her type, or already had plans
Car request	Success	Parents just want the adolescent out of the house, or want him/ her to take a sibling out with him/ her	Adolescent believes that his/ her parents view him/ her as a good, responsible driver
	Failure	Parents do not trust the adolescent	Parents need the car, or it is out of/ has little gas

Another method of facilitating adolescents' positive attributional style is through structured programs. Weiner (1984) explained that academic change/ enhancement programs positively influence students' motivation and goal attainment. These programs

change student's causal perceptions of failure from stable - uncontrollable (lack of ability) to unstable - controllable causes (lack of effort) through feedback to the student, and this feedback facilitates higher expectancies of success following failures. Markus et al. (1990) noted that having the person focus on lack of effort as the cause of his/ her failure positively affected adaptive performance, thus, facilitated a positive attributional style. Markus et al. further noted that a positive aspect of this focus on effort as a causal explanation for failure was that it created a sense of control in the person (e.g., "I failed due to lack of effort"). This sense of control increases positive attributions and could foster beliefs that he/ she has more control over time constraints and stress; two major concerns noted by Newfoundland adolescents (Westera & Bennett, 1990). Increasing one's sense of control and positive attributions are especially beneficial for people who anticipate important future events with hopelessness (Markus et al, 1990). These researchers noted a second positive aspect of attributing one's failures to lack of effort, which is success may result from increased effort and that failure is not due to lack of ability. Research qualifies this finding, in that attributing success to *only* effort *can* have a negative affect because it is less reinforcing than ability attributions (Markus et al., 1990; Nicholls, 1990). Markus et al. explained that this problem can be offset by introducing success as due to ability (e.g., "I have the ability to do it") after the initial growth in the effort - success belief. The expectancy of success from increased effort, in turn, positively influences motivational indexes (e.g., enhanced goal directed behaviour, persistence, intensity, quality of work). Therefore, adolescents with positive, mastery

oriented attributional styles would expect success, be more likely to have higher academic achievement (as he/ she attributed success and failure in adaptive ways), persist in the face of failure, and have a sense of control over events in their lives. Conversely, adolescents with maladaptive achievement behaviour would expect failure, avoid achievement tasks, give up in the face of failure, display less intensity on achievement tasks, and believe they have less control over events in their lives.

Other structured courses, such as the curriculum of Newfoundland's Grade Nine Adolescence course (Casey, 1991), may facilitate positive attributional styles and well being. This course provides adolescents with the opportunity to discuss and practice various decision making, coping, and self control skills (e.g., assertive behaviour, stress reduction, effective communication, use of decision making models). Newton (1995) reported that an ongoing theme in adolescent therapy was helping adolescents move from an external-focus style of decision making and coping (a negative attributional style) to an internal, self-initiated focus for coping and problem solving (a positive attributional style). This internal cognitive style of coping has been referred to as a "healthy adult coping [style]" and was "based on taking responsibility for oneself and one's problems" (p. 69). Ortman (1988) showed that adolescents who felt they had some control over their lives, were able to make choices, and took responsibility for their own behaviour experienced more satisfaction with their lives. Rosenbaum (1990) found that a related variable, "learned resourcefulness" or learned self-control skills, also influenced people's

causal attributions. The author further explained that highly resourceful people attribute successful outcomes to their own efforts even on tasks in which the outcome was independent of the person's efforts (internal attribution of success). Therefore, adolescents identified as having poor decision making, coping, and self control skills could complete structured courses to facilitate the development of these skills, positive attributional styles and adolescent well being (e.g., increased feelings of control and satisfaction in their lives).

Educational and classroom structures have also been noted to affect students' attributions and learning (Schunk, 1991). Schunk noted that competition for grades and other rewards heightened students' ability comparisons. There is a beneficial effect of success being attributed to ability, but negative attributions of failure to ability also form and lead to ego-involved motivational states (e.g., "Am I smart?"). The author encouraged the use of a cooperative classroom structure, as ability differences within this structure were minimized and achievement was enhanced by effort attributions (e.g., "Am I trying hard enough?").

Depression is a commonly reported state in adolescence (Westera & Bennett, 1990) that is correlated with attributional style (Synder & Higgins, 1986). Synder and Higgins noted a correlation of non-depressed peoples' positive attributions of failure (to external, unstable, specific causes), as opposed to depressed people's negative pattern of internal,

stable, global failure attributions. Peterson et al. (1983) proposed that the external, unstable, specific failure attributions preceded a decrease in depression. Thus, by encouraging the development of the adaptive external, unstable, and specific causes for failure, depression could be reduced/ prevented. Attributional reformulations of the learned helplessness theory have produced therapeutic approaches to reduce depression, helplessness, and self esteem loss: personal control training, attribution therapy, behaviour modification, and cognitive therapy (Peterson, 1982). Peterson's review of the literature noted that personal control training and attribution therapy were two approaches that may change one's depression and helpless behaviour. Personal control training involves changing people's expectations from uncontrollable to controllable expectations about events. The author noted that changing a person's depressive attributions (e.g., uncontrollable failure) positively affected his/ her expectations. Thus, an adolescent would have higher expectations that positive events/ success would happen to them, rather than negative events/ failure. Attribution therapy involved moving people's specific and habitual attributions "from internal, stable, and global causes for bad events" and external unstable and specific causes for good events (negative causal attributions) to the converse, and could involve "talking therapy" or "*in vivo* experiences" (exploration of one's habitual attributions and positive success/ failure attributions) (p. 103). In the same article, Peterson noted that behaviour modification (encouraging certain acceptable behaviours with the intent of internalizing the behaviour and underlying belief) and cognitive therapy (changing one's beliefs/ belief structure) fit under the reformulated

learned helplessness theory. He noted that behaviour modification and cognitive therapy have a common assumption that abnormal behaviour can be understood from the client's thoughts/ cognitions and beliefs. Peterson elaborated that due to this common assumption, therapy should focus on changing the client's cognitions and beliefs through his/ her belief system. Due to an interconnectedness between beliefs, a therapist could change a person's attributions by adding other beliefs. The effect would cast the client's previous beliefs in a new light. For example, a depressed person's internal, stable, and global attributions for failure could be re-casted within a Christian perspective. This Christian perspective entails seeing "internal, stable, global causes [for failure] (e.g., sinfulness)" in a different context (e.g., God's forgiveness of sins), thereby reducing the negative effects of the person's depressed attribution styles (Peterson, 1982, p. 107). The addition of these new strands to the person's web of beliefs "changes the entire fabric" of his/ her belief system (p. 110). Thus, adolescent depression can be addressed by increasing adolescent's positive expectancies, and casting his/ her depressive attributions into less depressive and more positive attributional styles, which affects the adolescent's cognitions and behaviours and facilitates a more positive state of well being.

Research has found attributions of success and failure differ between people with low and high self concept. Hattie (1992, p. 193) stated that "high [self] concept persons attribute success to positive internal factors, whereas low self concept persons attribute success to negative external factors". Craske (1988) also noted that low self concept predisposed

failure attributions to lack of ability, which in turn mediated reduced persistence and attainment levels. Craske went further to note that one's self concept (low or high) maintains itself. The implication is that the low self concept cycle must be broken to enhance a positive self concept and its associated positive attributional style.

Adolescence may be an opportune time to break this cycle, as early adolescents are developing the cognitive ability to more clearly differentiate success and failure attributions between ability and effort, and skills and luck (Nicholls, 1990). More positive attributional styles (internal, stable and global causes for success, and external, unstable (variable), specific, and controllable causes for failure) can be facilitated through exploring information and thoughts one has about oneself. The Shavelson, Hubner, and Stanton (1976) self concept model explained that there were many domains and sub-domains to one's self concept, though most correlated to the main domains of academic and non-academic self concept. For example, if the adolescent was experiencing low levels of "peer self concept" (a sub domain of non-academic/ social self concept), then information about relationships and successful interactions with peers could lead to internal, stable, and global attributions (e.g., the adolescent's self perception that he/ she is a worthy, valued friend), while perceived slights from peers would be re-framed to become external, specific and uncontrollable (e.g., the peers were in a hurry, just fooling around, in a bad mood, etc.). This shift from negative to positive attributions could also be applied to adolescents' poor academic self concept, as seen from the Shavelson model (Byrne & Gavin, 1996) and the Marsh/ Shavelson model (Marsh, 1990) of academic self

concept. The adolescent's english self concept could be increased by changing his/ her attributions so that he/ she believes that increased effort increases his/ her academic success (a positive internal attribution for success) and that failures may be due to lack of effort, poor strategy use, or task difficulty (a positive external attribution for failure). Therefore, providing an adolescent with alternate positive explanations for his/ her success/ failure enables them to stop his/ her predispositions to negatively attribute success and failure, break the cycle maintaining one's low self concept, and facilitates the development of the adolescent's positive self concept.

Conclusion

A person's thoughts determine his/ her emotions, which then guide one's behaviour. This outcome is then assigned (attributed) to a cause. People habitually assign causes to their success and failures, and this attributional style can be positive or negative. A positive attributional style consists of attributing success to internal, global, and stable causes, and attributing failure to external, unstable/ variable, specific, and controllable causes. Positive attributional style influences the self's cognitions, emotions and behaviours in positive/ adaptive ways, and is associated with higher states of well being. This style insulates the adolescent from damaging and negative attributions of events to the self. A negative attributional style consists of attributing success to unstable, external, uncontrollable causes, and attributing failure to global, stable, internal, and uncontrollable causes. Negative attributions affect the self's cognitions, emotions, behaviours in

maladaptive and negative ways. This style makes the adolescent prone to negative and damaging attributions of events to the self, and negatively affects well being. Negative attributions are associated with many adolescent concerns and problems, such as depression, feelings of helplessness, low self esteem, low levels of academic achievement, ineffectual coping, and unhealthy behaviours. The adolescents' attribution style reinforces and perpetuates itself, thus, negative attributional styles will require intervention strategies to retrain the negative attributional style into a more positive style. Intervention strategies such as attribution retraining, therapy (e.g., personal control training, attribution training, behaviour management, cognitive therapy), structured courses, and educational structures/ systems can change adolescents' negative attributions. This paper highlights the importance of attributional style and is intended for people dealing with adolescents (e.g., parents, teachers, counsellors, adolescents), who can use these methods to facilitate the growth of adolescents' positive attributional style development, effectively retrain negative attributional styles, and promote adolescent well being.

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**Enhancement of Adolescent Well Being Through Enhancement of
Self Esteem, Self Efficacy, and Positive Attributional Style
(Conclusion)**

by

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Introduction

Adolescence is a period between ages 12 and 19 characterized by rapid, physical, cognitive, affective, and social development (Jacobs & Ganzel, 1993). Western culture's concept of adolescence is a relatively new concept, which has its roots in the Victorian Era. This conceptual shift brought with it new challenges for the adolescent, such as self determination of one's identity, values, and adult life (e.g., school and career plans) (Baumeister & Tice, 1986). These authors noted that adolescence became an extended period of time to form one's adult "self". Modern day adolescence is popularly believed to be a time of storm and stress, but may more accurately be portrayed as a problematic time, punctuated with periods of instability within a context of constant change (Dusek & Flaherty, 1981). Thus, adolescence is a time of experiencing changes in the self.

This paper discusses three aspects of self; self esteem (feelings of self worth), self efficacy (evaluations of one's capabilities to perform acts and attain a goal), and attributional style (beliefs as to the cause of successful or failed outcomes). Self esteem and self efficacy characteristically fluctuate, though gradually increase, during adolescence (Breakwell, 1992; Newton, 1995; Rosenberg, 1979). Characteristic adolescent changes, such as cognitive development (Nicholls, 1990) and increasingly critical views of the self (Newton, 1995; Rosenberg, 1985), may predispose the adolescent to form a negative attributional style (e.g., helpless cognitions, emotions, and behaviour). Thus, adolescence is an opportune time for efforts to develop self esteem,

self efficacy, and positive attributional style.

The role of self esteem, self efficacy and attributional style in adolescent well being

Adolescents' self evaluations of worth, competence, and causal thinking have positive and negative effects on their well being. Positive or high levels of self esteem, self efficacy, and attributional style contribute to the adolescents' state of physical and emotional well being. Research has shown there is a relationship between high self esteem and well being (Battle, 1987, 1990; Benzer, Adams, & Steinhardt, 1997; Deci & Ryan, 1995; Dielman, Shope, Butchart, Campanellie, & Caspar, 1989; Giblin, Poland, & Sachs, 1986, 1987; Harter, 1990a; Kissiar & Hagedorn, 1979; Mruk, 1995; Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995; Torres, Fernandez, & Maceira, 1995; Vingilis, Wade, & Adlaf, 1998; Wilson & Petruska, 1982; Zimmerman, Copeland, Shope, & Dielman, 1997). Deci and Ryan (1995, p. 31) found that self esteem was "central in a broad network of constructs associated to motivation, performance, and well being". Kissiar and Hagedorn (1979) noted that adolescent self esteem had a strong influence on all aspects of the adolescent's life. Other research has found that positive self esteem was critical during adolescence due to a significant correlation to adolescents' general health (e.g., mental health, personal health, social aspects of health, nutrition and safety) and the formation of "favourable health behaviour" (Torres et al., p. 410). Zimmerman et al. (1997) found that adolescents with moderate to high self esteem had developmentally healthier behaviours and beliefs (e.g., less susceptibility to peer pressure,

alcohol use/ misuse, and tolerance of deviant behaviours). Other research has found that adolescents' perceptions of physical health were linked to their emotional well being and self esteem (Vingilis et al., 1998). Negative relationships with low self esteem and adolescent physical and mental well being are also noted in the literature, including missed pregnancy visits (Giblin, Poland, & Sachs, 1986, 1987), increased psychopathology (e.g., depression, anxiety) (Shek, 1998), and participation in risky, health endangering behaviours, such as substance use and taking social risks (e.g., dropping out of school) (Rouse, Ingersoll, & Orr, 1998), and traffic citations/accidents (Smith & Heckert, 1998). Therefore, high self esteem has a positive relationship, and low self esteem has a negative relationship, to adolescent well being.

An adolescent's level of self efficacy influences his/her state of well being. Self efficacy has been noted as a contributor to one's physical, psychological, and psychosocial well being (Bandura, 1986, 1990, 1997; Nicholls, 1990), psychological health (Allgood & Stockard, 1992), social competence and mental health (Connolly, 1989) and psychosocial functioning (Bandura, 1986). Nicholls (1990) found that low self efficacy had negative effects on his/her emotional well being. Phillips and Zimmerman (1990, p. 41) noted that self efficacy and competence to achieve valued goals had been "implicated repeatedly as essential to healthy development", was associated with better adjustment throughout the lifespan, and mediated a wide range of adaptive behaviours. Honig (1995) found that an adolescent's high self efficacy allowed him/her to maintain a higher perceived health

status following exposure to violence. Other research has found that adolescents' high self efficacy beliefs led to adoption of health promoting behaviours, such as quitting smoking and safer sex practices (e.g., condom use) (Barnett, 1989). O' Leary (1992) found that higher levels of self efficacy were related to healthier physiological responses to stress (e.g., reduced activation of sympathetic adrenomedullary, hypothalamic pituitary adrenocortical, and immune systems). Self efficacy is also related to lower states of well being, as it promotes severe psychological dysfunctions (e.g., frequent distressing thoughts, excessive worrying about calamities), and high levels of stress and depression (Bandura, 1986, 1997). These research results support the claim that self efficacy has a relationship to adolescent well being, such that higher/ lower levels of self efficacy may lead to higher/ lower states of physical and psychological well being, respectively

Research has noted that attributional style is also related to aspects of well being.

Peterson & Seligman (1987) found that negative attributional style was associated with poor physical health, such as increased susceptibility to illness. Dua and Plumer (1993) noted a relationship between negative attributions of negative events, depression, and decreased psychological well being. Dua later found that negative attributional style had a positive correlation with negative affect/emotions, and a negative correlation with "retrospective [e.g., previous] and prospective [e.g., future] physical and psychological health" (Dua, 1995, p. 513). Morris, Morris, and Britton (1988) and Winefield, Tiggerman, and Smith (1988) also noted this negative correlation between negative

attributional style and emotional well being (e.g., depression, guilt, self blame, anxiety, coping); the higher the negative attributional style, the lower one's emotional well being. Other research has found that a positive attributional style serves a protective function, and is beneficial to one's physical and mental well being (Epstein, 1992). Attributions also "enhance feelings of control over their environment" (Wortman, 1976, p. 23), which has been associated with positive states of well being (APA Task Force on Health Research, 1976; Bandura, 1986, 1997; Nicholls, 1990). Thus, a relationship exists between attributional style and adolescent well being: positive attributional style may lead to higher states of physical and psychological well being, whereas a negative attributional style may predispose adolescents to lower states of well being.

The literature notes that high self esteem (Kissiar & Hagedorn, 1979; Pope, McHayle, & Craighead, 1988; Rosenberg, 1979), high self efficacy (Bandura (1982, 1986; Schunk 1984, 1985), and positive attributional style (Markus, Cross, & Wurf, 1990; Rosenbaum, 1990; Synder & Higgins, 1986; Weiner, 1984) serve a protective function in the self, such that they insulate the adolescent from the negative effects of negative outcomes. For example, Allen has just failed a mathematics test. Allen's self efficacy defends the self such that he is aware of the failure, but would not be negatively affected by it (e.g., he would not start to doubt his/her competency in mathematics). His positive attributional style would attribute the failure to an external, unstable, specific cause (e.g., lack of effort, a difficult test) and ward off the negative effects of internal attributions (e.g., lack

of ability) which could lead Allen to stop trying hard on tests, or drop out of school. His positive self esteem would prevent him from perceiving his failure as a marker of his worthlessness, and thinking that his teacher will no longer value him. Allen would still see himself as a person of worth. Now consider Betty, who has low self esteem, low self efficacy and negative attributional style, and has also failed the mathematics test. She may perceive the failure as not being smart (negative attribution), that she is not good in mathematics (feels inefficient), and that she is not worthy enough to be friends with her mathematics classmates (low sense of worth in which her worth was contingent on her mathematics performance). Thus, these aspects of self can insulate, or make the adolescent more prone to, the negative effects of negative outcomes. This insulating quality of self esteem, self efficacy, and positive attributional style contributes to the adolescents' well being.

The role of self esteem, self efficacy and attributional style in adolescent problems

Low levels of self esteem and self efficacy, and negative attributional style seem to contribute to adolescent's problems and concerns. Research has shown that adolescents' lower levels of academic achievement, ineffective coping efforts, and depression were associated with low levels of self esteem (Battle, 1980, 1987a; Brookover & Thomas, 1964; Hattie, 1992; Yaniv, 1983), poor self efficacy (Bandura, 1986; Barnett, 1989; Multon, Brown & Lent, 1991; Pajares, 1996; Schunk, 1984), and negative attributional style (Dua & Plumer, 1993; Layden, 1982; Rosenbaum, 1990; Synder & Higgins, 1986;

Weiner, 1985).

Self esteem plays a role in other adolescent problems. Research has shown that low self esteem is associated with adolescents' increased peer conformity and lower satisfaction with personal appearance (Kissiar & Hagedorn, 1979), low rates of social acceptance (Harter, 1990), poor motivation (Battle, 1987; Rosenberg, 1979), anxiety (Battle, 1987a, 1988), earlier/ risky behaviours such as sexual behaviour, suicide, and drug and alcohol use/ abuse (Irwin & Schafer, 1992; Skager & Kerst, 1989; Uribe & Ostrov, 1989, respectively), and concern with one's competencies and deficiencies (Rosenberg, 1986). This research shows that low self esteem is linked to adolescents' problems and negative adolescent experiences (e.g., decreased motivation, increased anxiety), which have a negative affect on adolescent well being.

Self efficacy is also associated with common adolescent concerns and problems. Much research has shown that low personal control efficacy is associated with involvement in early/ risky behaviours, such as smoking, drug use, and sex (Allen, Leadbeater, & Aber, 1990; Bandura, 1977, 1997; Basen-Engquist & Parcel, 1992; Jemmott, Jemmott, & Fong, 1992a; Jemmott, Jemmott, Spears, Hewitt, & Cruz-Collins, 1992b; O'Leary, 1992; Walter et al, 1993). Low self efficacy is especially problematic in female adolescents, as it is linked to increases in likelihood of forced sexual activity/ date rape (Walsh & Foshee, 1998). Research has found that a desire to attain self regulatory efficacy (e.g.,

time management) is a common concern in adolescence (Westera & Bennett, 1990). Bandura (1997) noted that an adolescent's low self efficacy in his/her personal competencies led to high emotional arousal, excessive preoccupation with personal deficiencies, and overestimation of potential difficulties. Low self efficacy and adolescent concerns about others' opinions and impression making are associated with adolescents' avoidance of various situations (Bandura, 1982b; Marsh, 1993). Bandura (1986, p. 430) also noted that low/ high self efficacy was linked to positive/ negative states of "social behaviour, coping behaviour, stress reactions, physiological arousal, depression, pain tolerance, physical stamina, behavioural self regulation, self motivation, achievement strivings, athletic attainments, and career choice and development". Allen, Leadbeater, and Aber (1990) also found that low self efficacy was related to the adolescent and adult's failures in drug treatment programs. Other research has shown that low self efficacy is related to adolescents' low participation in leisure time exercise activities and less healthy eating habits (Rabinowitz, Melamed, Weinsberg, Tal, & Ribaket, 1993), which impacts on their growth (Cusatis & Shannon, 1996). These research results support the position that low self efficacy is related to common adolescents' problems and concerns, and that this aspect of self negatively impacts on adolescents' well being.

Attributional style also plays a role in adolescents' problems. Weiner (1984, 1985) found that adolescents usually experienced guilt when negative consequences were ascribed to

personally controllable causes (e.g., failure due to lack of effort). He also noted that negative outcomes attributed to stable factors resulted in adolescents' feelings of hopelessness and resignation (Weiner, 1984). Bar-Tal (1982) found that negative teacher- student interactions promoted the development of negative attributions and poor achievement behaviour in students (e.g., success due to external causes, and failure due to uncontrollable causes). Negative attributional style is also related to obese adolescents' lower rates of compliance and weight loss within weight control programs (Uzark, Becker, Dielman, & Rocchini, 1989), and unsuccessful management of chronic/ long term medical conditions (Kuttner, Delamater, & Santiago, 1991). These research results support the position that negative attributional style is related to some common adolescents' problems and concerns, and negatively impacts on adolescents' well being.

Interventions enhance self esteem, self efficacy and positive attributional style

Relationships exist between self esteem, self efficacy, attributional style and common adolescent problems and well being. These relationships highlight that high/ positive levels of self esteem, self efficacy, attributional style are preferred, adaptive states within the self (Harter, 1990; Bandura, 1986; Dua, 1995, respectively). Thus, people dealing with adolescents should strive to promote high/ more positive levels of these psychological variables and develop adaptable adolescents.

Interventions are effective in changing adolescents' low self esteem. Research has shown

that strategies targeting general, parent-related, social, personal, and academic facets of self esteem are effective in enhancing adolescents' (and other age groups) self esteem (Battle, 1990, 1991). These strategies enhance adolescent self esteem by developing positive interactions between the adolescent and significant others (e.g., teachers, parents), exposing the adolescent to success experiences (success at important tasks), encouraging the adolescent's attempts at a task and use unconditional positive self regard, encouraging mutual respect, using problem resolution programs, psychotherapy/ counselling (individual or group), and various sorts of programming (e.g., physical training, assertiveness sessions).

Self efficacy can also increase through intervention strategies. Self efficacy intervention programs should follow guidelines for structuring personal change programs as outlined by Bandura (1997) such as focusing on familiar aspects/ subskills of new situations, codeveloping skills, self regulatory skills, finding commonalities across diverse activities, and restructuring efficacy beliefs. Other researchers note that self efficacy programs should also focus on practising and acquiring behaviours, "reframing" failures, learning to tolerate disturbing emotions and changes in the self, and coping with situations (Wexler, 1991). Bandura (1982, 1982b, 1990) and Schunk (1984) have noted that the four principals of self efficacy development (direct experience, vicarious experience, verbal persuasion, and physiological responses) could also be used to develop more efficacious beliefs.

Negative attributional style can change to a more positive attributional style through attributional retraining. Support for attributional retraining can be found in the literature (e.g., Layden, 1982; Peterson, 1982; Weiner, 1984; Schunk, 1991). Layden (1982) noted that there is a retraining process one must go through in order to retrain a negative attributional style to a positive attributional style. This retraining process involves identifying the task in which the person (e.g., adolescent) negatively attributes success (success as due to unstable, external, uncontrollable causes) and failure (failure as due to global, stable, internal causes), and changing the negative success and failure attributions to the converse. Thus, *failure* would be attributed to unstable, external, uncontrollable causes, and *success* would be due to global, stable, internal causes. Research has shown that negative attributional style can be retrained through structured programs (Weiner, 1984), educational and classroom structures (Schunk, 1991), and various therapy styles such as personal control training, attribution therapy, behaviour modification, and cognitive therapy (Peterson, 1982).

This research into intervention strategies for self esteem, self efficacy, and attributional style reaffirms the notion that low/negative levels of these variables are maladaptive, innately dissatisfying and non-pleasurable (Rosenberg, 1979), are associated with many adolescent problems, and lower states of adolescent well being. This research shows that adolescents' low self esteem and self efficacy, and negative attributional style can be enhanced or retrained to levels associated with higher states of well being.

Summary

High self esteem, self efficacy and positive attributional style influence adolescents' well being and insulates them from the negative effects of negative outcomes. This paper provides important information for people dealing with adolescents (e.g., parents, educators) to increase their awareness as to how these variables affect the adolescent's life. This information is presented such that these parents and educators (and other adolescents) may realize the important role they play in enhancing adolescents' self esteem, self efficacy and positive attributional style. Through these intervention strategies, parents and educators can provide an environment, shape positive interactions, and use specific programming which is conducive to developing self esteem, self efficacy and positive attributions, and adolescent well being.

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