THE RELATIONSHIP BETWEEN LOCUS OF CONTROL, PARENTING STYLE, TEACHING STYLE, AND SELF-ESTEEM ON THE PRACTICE OF HEALTHY LIFESTYLE BEHAVIORS AMONG CHINESE HIGH SCHOOL STUDENTS FROM THREE HIGH SCHOOLS IN XINJIANG PROVINCE

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Abstract: The present study employed path analysis to investigate the impact of locus of control, parenting style, teaching style, and self-esteem on the practice of healthy lifestyle behaviors among a sample of Chinese high school students. 300 high school students from three high schools in China participated by responding to a questionnaire developed to meet the objectives of the study. Results from the study revealed significant relationships between the following variables: (1) authoritative teaching style and internal locus of control with physical exercise; (2) internal locus of control with having breakfast on time; (3) neglectful parenting style and internal locus of control with having enough sleep; (4) neglectful teaching style with brushing one's teeth after a meal and paying attention to safety issues; and (5) indulgent parenting style and internal and chance locus of control with good eye care. The implications of and recommendations from these findings for the practice of health care behaviors among Chinese high school students are discussed.

Keywords: Locus of Control, Parenting Style, Teaching Style, Self-Esteem, Healthy Lifestyle Behaviors, Chinese High School Students

Introduction

While teaching in China, the current researcher observed that many teachers in high schools paid much attention to their knowledge and skills of teaching, but did not teach students about controlling their emotions, building up a good personality, and living a healthy lifestyle. The relationship between teachers and students became more unidirectional and easier, in favor of teachers. Unidirectional, within the teaching context, refers to the tendency for teachers to their teaching specifically communication of knowledge, often not requiring or ignoring feedback from students. Thus, teachers often do not know what their students' learning needs are. Easier relationship, within the same context, refers to the tendency for teachers to pay much attention to their own knowledge and skills of teaching, often ignoring the important tasks of teaching students how to control their emotions, develop a good personality, and adopt healthy lifestyles. Consequently, students who have problems often choose to keep their problems to themselves instead of consulting with their teachers.

This researcher also observed that students were becoming lonelier at school and at home. They have very few friends; they seem not to want to share their feelings with their peers and hardly ever discussed problems with their parents and teachers. Many high school students appear to have their own lifestyles and do not want nor expect others to understand them. This behavior and attitude toward their friends and authoritative figures have caused psychological problems for these young person's such as depression, anxiety, and emotional problems. The current researcher hopes to help rectify the situation by helping students understand their problems and ultimately solve them. The researcher also believes that high school teachers and administrators should provide students with the right knowledge, skills, attitudes, and values to help them face the realities of life, work, and society, in general. It is an important step for high school students to learn the best approaches toward studying, communicating, and living a healthy lifestyle.

The current researcher himself was, for some time, a high school teacher in China. He has always been interested not only in teaching academic subjects but also in sharing practical knowledge with students to help them grow and to develop their potential. It has been frustrating, however, to see teenage students who could not control their emotions or cope with their psychological problems, because there were no professional systems that they could approach for help. Without such systems, students could not get proper advice or help on how to make their lives better and healthier.

For these reasons, this researcher has taken up the challenge of investigating a number of relevant issues that need to be addressed, with a view to sharing the results and findings with individuals and groups who are in a better position to initiate and implement intervention schemes and programs to help promote good mental health and healthy lifestyles among high school students in Mainland China. The current study attempted to examine the influences of a number of factors that are assumed to impact on the healthy lifestyles of teenage students. These factors include locus of control, parenting style, teaching style, and self-esteem.

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Statement of the Problem

Past research has clearly shown that parenting style exerts a major influence on a child's development. For example, some studies have shown that authoritative parenting style is associated with higher self-esteem and lower depression than other parenting styles (Milevsky, Schlechter, Netter, & Keehn, 2007). However, the development of students is affected by a multitude of factors other than the parenting style they received. These factors may include interaction with other members in their families, interaction at school and with their social environment, and their own personality and mental states.

The main questions that can be asked are: How do these factors work together to help students change and better themselves? How do these factors operate to influence students to pursue a healthy lifestyle and therefore grow to be healthy adults? Which of these factors have stronger impact on the students' healthy lifestyle? Are there negative consequences from these factors on student development? Being a Chinese high school teacher, this researcher attempted to answer these questions as they applied to high school students in Mainland China.

Purpose of the Study

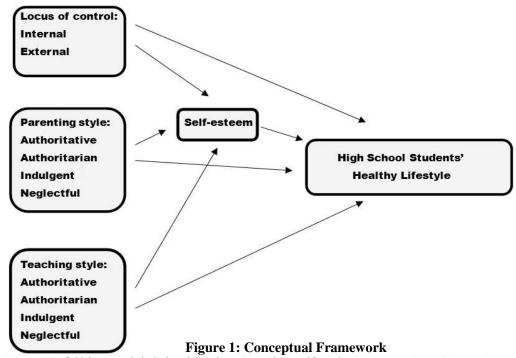
This research focused on the relationship between healthy lifestyle and locus of control, parenting style, teaching style, and self-esteem among Chinese high school students. More specifically, this exploratory study examined the impact of locus of control, parenting style, teaching style, and self-esteem on the healthy lifestyle of high school students in China.

Significance of the Study

This researcher believes that high school students are a very special group of people in China. Because of his work experience as a teacher, he is familiar with high school students' behaviors and thoughts and understands the problems these students face (e.g., heavy academic pressure, emotional stress, and relationship problems). The lack of family support as well as the inaccessibility to and unavailability of helping professionals such as counselors, psychologists, and social workers have made life more difficult for adolescent students who are, as it is, in a very vulnerable stage of their development. Hence, the importance of this kind of research in terms of its findings and implications cannot be overemphasized.

This study's literature review, database, and knowledge resource can be highly useful to school administrators, teachers, school psychologists, and health practitioners in China in their quest to help educate students on knowledge acquisition and healthy living. It is expected that the findings of this study would help bridge the knowledge gap on the impact of locus of control, parenting style, teaching style, and self-esteem on living a healthy lifestyle among high school students in China. Additionally, this study's findings and their implications are expected to be of some value not only to high school students but also to students ranging from primary school to college level.

Conceptual Framework



Path Model of Chinese High School Students' Healthy Lifestyle as A Function of the Direct and Indirect Influences (Being Mediated by Their Level of Self-Esteem) of Their Locus of Control, Parenting Style, and Teaching Style

Research Instrument

The survey questionnaire consists of the following six sections:

- ✓ Personal Information
- ✓ Parenting Style Scale (PSS)
- ✓ Rosenberg's Self-Esteem Scale (RSES)
- ✓ Teaching Style Scale (TSS)
- ✓ Internality, Powerful Others, and Chance Scale (IPC)
- ✓ Middle and High School Students' Healthy Lifestyle Questionnaire

Data Collection

Data collection consisted of the following procedural steps:

- 1. The researcher went to China where he contacted a number of high schools in which he had worked previously to obtain permission to conduct the study.
- 2. A pilot study was conducted on 30 students prior to the actual study. The pilot study aimed to check for any difficulty in understanding the questionnaire directions and item statements. Any reported problems with questionnaire directions and statements were corrected before the actual study.
- 3. For the actual study, informed consent was obtained before every participant was given the questionnaire.
- 4. After collection of all the completed questionnaires, the researcher individually inspected the questionnaires to check for possible errors in completion. Only valid questionnaires were used for statistical analysis.

Data Analysis

After completion of the data collection process, the data were entered into the Statistical Package for Social Sciences (SPSS) for analysis. The process of data analysis was accomplished via the following statistical treatments:

Descriptive Statistics. Frequency and percentage distribution were used to analyze the respondents' demographic information. Means and standard deviations of the study's primary variables were computed.

Inferential Statistics. Multiple regression analysis was employed to test the hypothesized direct and indirect predictive relationships between locus of control, parenting style, teaching style, and self-esteem on Chinese high school students' healthy lifestyle behaviors.

Findings

Relationships between teaching style, parenting style, locus of control, and self-esteem with the health behavior of exercise.

The results from the path analysis indicated that the respondents' perception of their teachers' teaching style as authoritative is directly and positively associated with the frequency of their physical exercise behavior. Specifically, the finding indicated that the more the Chinese student respondents perceived their teachers' teaching style authoritative, the higher is the frequency of their reported physical exercise. This finding is in line with that obtained by Wang (1999) which showed that those teachers who have an authoritative teaching style tended to pay more attention to their students' healthy lifestyle behaviors, by encouraging their students to exercise every day. Thus, students who perceived their teachers' requests of and responses to them (authoritative teaching style) positively were willing to follow their teachers' encouragement by exercising frequently. This is not unexpected, as an authoritative teaching style would be expected to engender positive interaction between the teacher and students, and thus promote an increased willingness among the students to conform to their teachers' expectations. Simply, an authoritative teaching style that makes both reasonable requests of and adequate responses to students' needs tend to engender a more balanced relationship between teacher and student. Students not only find it easier to develop closer relationship with authoritative teachers but also are also more likely to accept their teachers' suggestions about physical exercise.

The study's findings also showed that the more 'internally controlled' the students perceived themselves to be, the more frequently they engaged in physical exercise. This finding is consistent with the research by Holt, Clark, Kreuter, and Scharff (2000) who reported that internal locus of control predicts health-related plan successes or failures. Being internally controlled reflects the belief that one's life outcomes are under one's personal control and are not affected by external factors such as chance or powerful others (Bandura, 1997). Having control over one's actions as well as taking responsibility for the consequences of those actions reflects what Bandura (1997) termed 'self-efficacy'. For the present study, Chinese student respondents perceiving themselves to be internally controlled enhances their feeling of selfefficacy and thus their belief that they can do something to better themselves, e.g., exercising more frequently for a healthier lifestyle.

The findings from the present study also showed that the respondents' perceived neglectful

parenting style, authoritative teaching style, internal and powerful others forms of locus of control are significant predictors of their level of self-esteem. More specifically, the less the Chinese student respondents perceived their parents' parenting style as neglectful, the more they perceived their teachers' teaching style as authoritative, the more internallycontrolled they perceived themselves to be, and the less they perceived themselves to be controlled by powerful others, the higher is their reported level of self-esteem. These findings are in line with those obtained from past research. For example, the finding that the respondents' perceived neglectful parenting style is negatively associated with their self-esteem is supported by Guo's (2003) and Chen's (2000) findings which showed that neglectful authoritarian parenting styles have negative effects on adolescents' self-esteem. In terms of these two parenting styles, the finding of a negative relationship with self-esteem is not unexpected. According to Maccoby and Martin (1983), both the neglectful and authoritarian parenting styles are characterized by low responses to their children's needs. Chen (2000) noted in her study that over 70% of her respondents felt neglected by their parents from whom they perceived that they had received little care. In addition, they blamed themselves for their parents' neglectfulness, believing that they did something wrong to have caused the situation. Feeling neglected and coupled with self-blame could have lowered the respondents' self-esteem.

Alternatively, the study's findings showed that the respondents' perception of an authoritative teaching style is positively associated with their higher self-esteem. This finding is also unexpected given that an authoritative teaching style is characterized by the teacher's 'high request' of and 'high response' to their students' needs (Maccoby & Martin, 1983). By being attentive to their students, an authoritative teacher creates an environment where students feel that they are cared for, that they are listened to, and where their needs are attended. Such an environment can serve to bolster the students' level of self-esteem. This finding is in line with those obtained in an earlier study by Chen (2000). In this study, Chen found a significant association between authoritative teaching style, student achievement, and students' self-esteem. She noted that teachers who make high request of their students engender high self-esteem in their students, and those students who have high self-esteem in turn, tended to have high achievement.

In terms of locus of control, the study's findings showed that the more the respondents perceived themselves as being internally controlled, the higher their reported level of self-esteem. This

finding is in line with those obtained by Huang (1979), Hunter, Gerbing, and Boster(1982) and Thoresen, Judge, Erez, and Bono (2002) which showed a significant positive relationship between internal locus of control and self-esteem. This finding is also consistent with those obtained by Hojat (1982) who, using factor analysis, found that self-esteem, locus of control, and neuroticism had their highest loadings on a common factor. Similarly, the finding of a negative relationship between powerful others (external locus of control) and self-esteem is supported by Griffore, Kallen, Popovich, and Powell (1990). The belief that one's life outcomes are controlled by powerful others (e.g., teachers, parents) implies that one has little control over one's life. If the present student respondents believe that they have no control over their own life destiny, then why would they bother expending any effort in improving their lives? For the study's student respondents, having to do what their teachers and parents tell them to do erode their feeling of independence, create a sense that they have no control over their own destiny, and subsequently, lower their feeling of self-esteem.

Relationships between internal locus of control and self-esteem with the health behavior of 'eating breakfast on time'.

The findings showed a significant positive relationship between the respondents' internal locus of control and their reporting of 'eating their breakfast on time'. Specifically, the more the Chinese student respondents perceived that they are in control of their life outcomes, the more frequently they reported eating their breakfast on time. This finding echoes that of Steptoe and Wardle (2001) who found a positive and significant correlation between their subjects' reported level of internal locus of control and the regularity of their breakfast consumption. Similarly, Yang (2000) found that students with high internal locus of control tended to practice good lifestyle behaviors such as eating breakfast and sleeping on time. According to Zhao (1997), people who are high in internal locus of control clearly plan their personal life. This is because internally controlled people believe that all things are caused by their own behaviors and thus tend to plan and to follow through the plan to its fruition. It is quite possible that those students who are high in internal locus of control realize how important breakfast is for the start a new day; hence, having breakfast at the right time each day is part of their plan to have a good day, especially at school.

The present findings also showed a significant relationship between self-esteem and frequency of eating breakfast on time. Specifically, the higher the Chinese student respondents' reported

level of self-esteem, the more frequent they reported eating their breakfast on time. A study by E-Home Fellowship (EHF, 2001) pointed out that children feel they are important to their parents when they have breakfast together every morning. This research posited that during breakfast, the parent-child bonding relationship becomes closer and stronger, and the child's self-esteem becomes higher. This opinion is in line with the findings of the current study. The importance of having breakfast regularly is further emphasized in a study by Wang (1991) who reported that students would have more energy for studying or doing other work by having breakfast. Feeling energized from a hearty breakfast allows students to perform at their best and this leads to their higher selfesteem. Furthermore, eating breakfast on time everyday makes people stronger and healthier. It also helps young people attain a healthy body, and this would help make them feel more confident about themselves, thus increasing their self-esteem.

Relationships between neglectful parenting style and internal locus of control with the health behavior of 'having enough time to sleep'.

The study's findings show a significant and positive relationship between neglectful parenting style and having enough sleep. More specifically, the more the Chinese student respondents perceived their parents' parenting style as neglectful, the more frequent is their reported time of having enough sleep. To the best of the researcher's knowledge, there have been no studies conducted to date on the relationship between parenting styles and 'frequency of having enough sleep'. Nevertheless, based on the literature on the neglectful parenting style, it could be argued that the low requirement from and less management of their children by this type of parents creates an attitude in their children that they can do anything they want, including sleeping only when they feel like it instead of having a healthy routine of having enough sleep.

The study's findings also show a significant and positive relationship between internal locus of control and having enough sleep. This finding supports those obtained by Steptoe and Wardle (2001) which showed that most children who are high in internal locus of control have regular routine; for instance, having enough time for sleeping and eating dinner on time. Similarly, Huang (1993) reported significant positive relationships between his students' internal locus of control and their study and life behaviors. Specifically, the results showed that the more students perceived their locus of control as internal, the better their study and life behaviors, which include finishing home work on time, studying every day, sleeping on time, and cleaning one's room on time.

Relationships between neglectful teaching style and frequencies of 'brushing teeth after a meal' and 'paying attention on safety issues'.

This study also found a significant negative relationship between neglectful teaching style and frequency of students' brushing their teeth after a meal. That is, the results showed that for the Chinese student respondents, the more they perceived their teachers' teaching style as neglectful, the less frequent is their reported brushing of their teeth after a meal. This finding is not consistent with the findings of Jiang, Huang, and Lian (2000) which showed no significant relationship between neglectful teaching style and healthy lifestyle behaviors including brushing teeth after a meal. Nevertheless, the findings from the present study suggests that, inasmuch as neglectful teachers have low requests for their students, there is, correspondingly, little response from their students. It is also possible that neglectful teachers will ignore details of their students' study and life behaviors. These teachers are not likely to request their students to pay attention to minor behaviors such as brushing their teeth after a meal. Neglectful teachers are not likely to be seen as being instrumental in their students developing good habits towards a healthy lifestyle.

The study's findings also showed a significant negative relationship between neglectful teaching style and frequency of students' paying attention to safety issues. More specifically, the more the Chinese student respondents perceived their teachers' teaching style as neglectful, the less frequent is their reported paying attention to safety issues. There are past studies that support this finding. For example, Jiang, Huang, and Lian (2000) asserted that teachers are the most important persons for getting children to learn safety behaviors. In a similar vein, Hong (1983) posited that there is a relationship between teachers' comprehensive education system and their students' attitude toward safety behaviors. Additionally, Lin (1998) argued that the school environment is the best place to learn about safety, such as how to deal with fire and earthquake and, in general, how to develop safety behaviors. If, as pointed out by Lin that the teacher is an important factor for students to develop safety behaviors, then it follows from the results of the present study that neglectful teachers do not spend quality time with their students to explain about the need to develop safety habits and, as a result, their students do not develop the right attitude towards keeping themselves healthy and safe at all times.

Relationships between indulgent parenting style, internal and chance locus of control with the health

behavior of 'keeping distance between eyes and books at more than 30 cm'.

The study's findings showed a significant and positive relationship between indulgent parenting style and frequency of caring for their eyes among the student respondents. That is, the more the Chinese student respondents perceived their parents' parenting style as indulgent, the more frequent they practiced the healthy behavior of keeping the distance between their eyes and books at more than 30 cm. To the best of the researcher's knowledge, there is no past research that examined the relationship between indulgent parenting and good eye care among children. Nevertheless, based on the literature on the indulgent style of parenting, it could be argued that indulgent parents, who are highly responsive to their children's needs (Maccoby & Martin, 1983) may also be highly sensitive to the need to keep their children healthy. Thus, they could have encouraged their children to practice and to form healthy habits such as maintaining a good reading distance and general care of their eves.

The study's findings also showed significant relationships between internal locus of control and chance locus of control with the frequency of caring for their eyes among the student respondents. The finding that internal locus of control is positively related to their eye care while chance (external) locus of control is negatively related to their eye care is supported by Steptoe and Wardle (2001) who found that the more internally controlled their respondents are, the more healthy behaviors they practiced, including taking good care of their eyes. Being internally controlled means taking responsibility for one's life outcomes. Thus, it is not unreasonable to assume that those children with an internal locus of control orientation are more likely than those with an external locus of control orientation to realize the benefits of maintaining a healthy lifestyle, which includes taking good care of their eyes.

Summary of discussion of finding

The present study showed that only the neglectful parenting style and the authoritative teaching style are significantly related to self-esteem. However, this does not mean that the authoritative and authoritarian parenting styles and the authoritarian and neglectful teaching styles are not important determinants of the students' self-esteem. Rather, these findings may merely be indicative of the parents and teachers placing more importance on and paying more attention to the children/students' acquisition of knowledge than on the development of their selfesteem. It may also be possible that while these and teachers realize that parenting/teaching style is important to the child's

development of self-esteem, they lack the appropriate parenting and teaching styles to do so.

The present study also found that internal locus of control is the best predictor of the students' high self-esteem when compared to the effects of external locus of control, teaching styles, and parenting styles. This suggests that self-esteem is more strongly influenced by the students' belief in their own ability to control their life outcomes than by any of the study's other factors. It should be noted that the majority of these students are single children and as such, probably did not have much opportunity to communicate or interact with other people. Hence, they had to navigate through their childhood more or less on their own, and in doing so, had to rely mainly on themselves, with very little help or guidance from their peers. Relying on themselves builds selfconfidence and subsequently self-esteem in their own achievements.

Another interesting finding is that self-esteem is not an important factor in influencing the students' healthy behaviors. More specifically, it was found that self-esteem significantly predicted only the health behavior of 'eating breakfast on time'. The other health behaviors of 'having enough exercise', 'evecare', 'brushing one's teeth after meals', 'getting enough sleep' and 'paying attention to health issues' were not found to be significantly related to selfesteem. The failure of self-esteem to predict significantly the majority of the students' health behaviors as hypothesized, support the recent suggestions by Baumeister, Campbell, Krueger and Vohs (2003) and Pyszcynski and Cox (2004) that the beneficial consequences of the trait self-esteem do not lie with its ability to determine positive behavioral and mental health outcomes. Rather, the beneficial effects rest with what people do to obtain and to maintain self-esteem, i.e., what determines selfesteem rather than self-esteem as determinant.

The study's findings clearly showed that the students' adherence to an internal locus of control orientation is the best predictor of their health behaviors - 'frequent exercise', 'eating breakfast on time', 'getting enough sleep', and 'eye-care'. Given that adherence to an internal locus of control, orientation reflects the belief that one is in control of one's life outcomes, these findings are not surprising. As pointed out by Cui (1992), internal locus of control is the most important correlate of students' study behaviors and their life adjustment.

Recommendations

To school managers and teachers.

Based on the study's findings, it can be seen that the predominant teaching style is the indulgent style (high response to and low request of students; While teachers can be overly indulgent toward their students by being very responsive to their students' needs, they often lack the desire or motivation to make enough and necessary requirements of their students. The result is that while students learn to request and to have their personal needs in the classroom satisfied by their teachers, the lack of their teachers' demands and requirements of them in order to challenge their intellect means that they do not learn enough skills and knowledge from their teachers. This researcher therefore suggests that teachers in Chinese high schools make more demands and requirements of their students' effort to perform at a more intellectually challenging level. It is also suggested that school managers develop strategies to monitor their teachers' interaction with their students to ensure that sufficient requirements/demands are asked by the teachers of their students. Operating together, these strategies may have the potential to directly challenge their students' intellect and thus offer them the opportunity to perform at their optimum potential.

The study's findings also showed that internal locus of control contributed significantly to building the students' self-esteem as well as to the frequency with which they practice healthy lifestyle behaviors. In this connection, school administrators, teachers, and school counselors should develop and implement intervention programs that motivate students' belief in their control over their own life outcomes. Believing that they have personal control over their life has the potential to boost their confidence in their self-efficacy and motivation to succeed, and ultimately their actual success at school.

To parents.

Most of the student respondents in the study reported that their parents' parenting style is authoritative (high response to and high request of their children; However, this parenting style was not found to predict significantly any of the students' health behaviors or their self-esteem. Thus, while the student respondents regarded their parents' parenting style positively (authoritative), they were not influenced to engage in more healthy behaviors by this parenting style. The author suggests that these authoritative parents direct their 'high response to and high request of' their children toward helping their children to live a more healthy lifestyle by encouraging them to engage more frequently in the health behaviors identified in the present study.

To Chinese high school students.

The study's findings showed that possessing an internal locus of control appears to be most effective in building self-esteem and contributing to the

practice of healthy lifestyle behaviors. In this connection, the researcher suggests that Chinese students who have high internal locus of control help their more externally controlled peers (those who may be more strongly influenced by powerful others and chance factors) to inculcate greater beliefs in their own abilities and to rely more on their own initiative and effort at school. They can achieve this by setting themselves up as role models for self-control and self-regulation as well as demonstrating their adherence to a healthy lifestyle, and thus become good examples for their peers to emulate.

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