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## ABSTRACT

This paper presents the results of an exploratory analysis of goals, self-concept, and abilities of academically resilient and non-resilient students, and compares them with the beliefs these students have about their schooling environment. Resilient students are defined as coming from an impoverished and stressful environment, yet achieving a 2.75 or greater grade point average (GPA). Non-resilient students come from the same background, yet do not have the requisite GPA. Subjects were 17 resilient and 19 non-resilient students identified from a population of 170 urban high school students. The results show that students believe their schooling environment supports their cognitive abilities. However, their schooling environment is not supportive of a number of other abilities including social abilities, happiness, self-determination, individuality, and resource provision (helping others). An appendix contains a figure illustrating the conceptual framework. (Contains 14 references.) (Author/SLD)

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Resilient Students' Beliefs About Their Schooling Environment:  
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Abstract

This paper presents the results of an exploratory analysis of goals, self-concept, and abilities of academically resilient and non-resilient students and compares them to the beliefs these students have about their schooling environment. Resilient students are defined as coming from an impoverished and stressful environment, yet achieving a 2.75 or greater grade point average (gpa). Non-resilient students come from the same background, yet do not have the requisite gpa. The results show that students believe their schooling environment supports their cognitive abilities. However, their schooling environment is not supportive of a number of other abilities including social abilities, happiness, self-determination, individuality, and resource provision (helping others).

# Resilient Students' Beliefs About Their Schooling Environment: A Possible Role in Developing Goals and Motivation.

## Introduction

Resiliency is the ability to thrive, mature, and increase competence in the face of adverse circumstances or obstacles. These circumstances may be severe and infrequent or chronic and consistent. In order to thrive, mature, and increase competence a person must draw on all of their resources; biological, psychological, and environmental (Gordon, 1993). Resilience, therefore is a multi-faceted phenomena. In addition, the definition of competence, and subsequently resilience, changes over a person's life span. The tasks that resilient infants need to accomplish in order to be considered resilient are not the same tasks that adolescents or adults need to accomplish in order to be considered resilient. Moreover, the adversities that one must face in order to be considered resilient vary. Therefore, different "types" of resiliency are possible. One may overcome sexual abuse, congenital heart defects, stressful environments, or any other number of adversities. In all cases one is considered resilient. Indeed, resiliency is a complex issue.

## Purpose

This paper presents the results of an exploratory analysis of the goals, self-concept, and abilities of academically resilient and non-resilient students and compares them to the beliefs these students have about their schooling environment. This exploration of goals, abilities, and environmental beliefs focuses on the final impact made on academic achievement. The results reveal the degree to which the resilient students believe their environment is facilitating or undermining their goal achievement. In other words, their schooling environment may either be viewed as a vulnerability producing or protective factor concerning the resilience that these students display.

## Literature Review

Past (Garmezy & Rutter, 1983; Murphy & Moriarity, 1976; and Werner & Smith, 1982) and contemporary (Luthar, 1991 and Winfield, 1991) studies of resilience in adolescence highlight a number of personal (biological and psychological) factors associated with resilience. The resilient adolescents are more socially responsible. They are also more androgynous than their counterparts. That is, the females are more adventurous and assertive. The males are more socially perceptive, sensitive, and emotionally responsive (Garmezy & Rutter, 1983). The resilient students are also friendly, they possess excellent social skills, and an internal locus of control (Luthar, 1991). Additionally, the resilient students are cognitively and academically superior to their counterparts (Garmezy & Rutter, 1983 and Winfield, 1991). It is important to note that one study did find intelligence to be a vulnerability inducing factor (Luthar, 1991). However, it is suggested that this is due to increased sensitivity that accompanies intelligence. It may also be due to a confound between the dependent and independent variables (Gordon, 1993).

## Conceptual Framework

The foundational framework for this research represents a merging of the resiliency framework and Motivational Systems Theory (Ford, 1992). Resilience is a multi-faceted phenomena that encompasses both personal and environmental factors. According to the resiliency framework (Rutter, 1987 and Winfield, 1991), there are four possible ways to facilitate resilience: 1. remove the stressors; 2. offer an alternate route to success; 3. stop the negative chain of events; and 4. increase self-esteem (self-concept). Motivation, although relatively neglected in resiliency research, can facilitate resilience by methods two, three, four, and possibly method one. Motivated

## Subjects

This study was conducted using 170 urban Caucasian high school sophomores. Seventeen of those 170 sophomores proved to be resilient while 19 of them were not resilient. The resilient students came from an economically deprived, stressful environment but were able to achieve a grade point average (gpa) of 2.75 or better. The non-resilient students came from the same background, economic deprivation and stress, yet were not able to achieve academically. In other words, the resilient and non-resilient students came from the same background but were separated by a measure of academic achievement, a grade point average of 2.75 or better.

## Method

### Measures

Demographic information was assessed by using the Hollingshead Index (1965). This index assesses parental education and occupation and segments the population into economic levels. The resilient students in this study fell in the lowest two sections of the index.

Stress was measured with a self-report Likert instrument created specifically for this study. It consisted of four questions on a four point scale. Each question addressed the amount of stress the students had in their life.

Grades were taken from students' transcripts. They were also weighted by the researcher according to difficulty. Students with a good number of advanced courses on their transcript were considered accelerated. Students with a good number of basic or lower level courses were considered slow or basic. All other students were considered average or normal. All slow or basic students were considered non-resilient.

Two measures were used to measure the students' goals, environmental

students are more likely to find an alternate route to success, stop the negative chain of events in their life, and have a higher sense of self-esteem (self-concept). It is even possible for motivated students to remove the stressors from their life.

Motivation as defined by Motivational Systems Theory (MST) (Ford, 1992) is the patterning of goals, emotions, and personal agency beliefs (self-esteem, self-concept). All three of these factors (goals, emotions, and self-concept) contribute to motivation. According to MST, motivation is also a factor that lies within the person, focuses on the future, and is used instrumentally to obtain some end. This means that motivation can not be a factor of the environment nor can it be focused on the past or present. Motivation is the means to obtaining some goal or result. In sum, motivation is an internal pattern of goals, emotions, and self-concept that focuses on and achieves some future result.

Combining the resiliency and MST frameworks produces this formula: economic disadvantage and stress + motivation = academic achievement and subsequent resilience (See Figure 1). In this formula, the resiliency framework is represented by the disadvantaged beginning plus some variable that leads to academic achievement. Motivation, as defined by the MST framework, is the mediating variable that leads to achievement. In other words, an "at-risk" student (economic disadvantage and stress) can overcome their situation and achieve academically through motivation and thereby display resilience. However, it is important to note that motivation is only one factor that contributes to resilience. Other factors like social skills, intelligence, androgyny, and internal control contribute to resilience, too. Motivation is the focus of this paper, especially the students' goals, abilities, and environmental perceptions.

beliefs and motivation. These measures were the High School Assessment of Academic Self-Concept (HSAASC) (Gordon, 1991) and the Assessment of Personal Agency Beliefs (APAB) (Ford and Chase, 1990). Both of these measures proved to be internally consistent. The reliabilities for the HSAASC ranged from .80 to .94. The reliabilities for the APAB ranged from .87 to .90.

The measures are based on Motivational Systems Theory (Ford, 1992). The HSAASC is a context specific measure which focuses on the high school environment. It assesses four high school domains (cognitive, social, extra-curricular, and personal) and four aspects of self-concept (ability, environmental responsiveness, control, and importance). This results in 16 subscales. Each subscale contains 5 items for a total of 80 items.

The APAB assesses 24 general life goals from three self-concept perspectives (importance, ability, and environmental responsiveness). Some of the life goals include mastery, transcendence, and superiority. This instrument has 72 items total.

### Analysis

The findings are based on several univariate analysis of variance procedures. The resilient students are compared to the non-resilient students on all indices. The HSAASC analyses are based on subscales. The APAB data are based on individual items.

### Results

The resilient students had a good number of goals and environmental beliefs that were related to their academic achievement. However, they did not believe their schooling environment to be totally supportive of their goals or abilities. They also had a variety of general life goals, but did not see their environment as facilitative of those goals, either.

One positive finding is the concordance between the resilient students' beliefs about their cognitive abilities and the support they received from their environment to pursue cognitive goals. The resilient students believed in their



ability to do well academically ( $F=9.22, p<.005$ ) and believed their schooling environment supported their attempts to do well academically ( $F=5.03, p<.03$ ). They placed a lot of emphasis on their cognitive goals ( $F=7.64, p<.009$ ) and felt they had control ( $F=10.31, p<.003$ ). For the total cognitive scale the resilient students had a stronger self-concept than the non resilient students ( $F=11.55, p<.002$ ).

In fact, they strongly believed they had control over goal accomplishment in their high school environment ( $F=4.72, P<.04$ ). This belief in their own control prevailed even in areas where their school environment was not supportive of their goals.

One area where their schooling environment was not believed to be supportive was the social domain. The resilient students felt they had the ability to make friends ( $F=4.11, p<.05$ ). They also felt they had control over whether or not they made friends ( $F=4.81, p<.04$ ). However, they did not feel that their environment allowed them to make friends. Their social environment was neutral and tenuous. Despite this their self concept in the social domain was better than the non-resilient students ( $F=5.53, p<.03$ ).

As for general goals, the resilient students believed the environment supported and acknowledged them for their achievements ( $F=5.96, P,.024$ ). However, they did not place more emphasis on this area of their life than the non-resilient students. Nor did they feel they had more ability or control in this area.

The students also believed their environment supported ethical and responsible behavior ( $F=7.47, p<.01$ ). This is one goal on which the students placed a lot of emphasis. ( $F=5.73, p<.03$ ).

However the resilient students had other goals that the environment did not support. These students placed a lot of importance on being happy ( $F=4.53, p<.05$ ), but did not believe their environment facilitated this goal. The resilient students did not believe they had the more ability to make themselves happy or control over this area of their life.

The resilient students felt they had the ability to do their own thing ( $F=5.92, p<.03$ ). They also felt it was important to do their own thing ( $F=8.12, p<.01$ ). However, they did not feel that the environment facilitated their ability or attempts at goal achievement.

The resilient students placed a lot of importance on being their own person ( $F=5.55, p<.030$ ). This goal was not supported by their environment. Nor did they feel they had more ability or control in this area of their lives.

They also felt they had the ability to give themselves praise and positive evaluations. ( $F=7.28, p<.02$ ). This ability was not supported by the environment, either. They did not; however, place a lot of emphasis here or believe in their own control of this area.

Most interestingly, these students felt they had the ability to help others ( $F=5.99, p<.03$ ). They also placed a lot of importance on helping others ( $F=4.68, p<.04$ ). Their environment did not facilitate their ability or goal achievement in this area of their life.

### Discussion

Although these resilient students are able to achieve academically, some domains of their schooling environment are not that supportive. In fact, the resilient students achieve despite the non-support received from some areas of their environment.

#### Environmental Support

The cognitive sphere of their life is one area where they have a healthy self-concept. The resilient students' belief in their cognitive ability is supported by a facilitative environment. Therefore, the resilient students believe that their goal achievement in this area is support by those in their schooling environment. They also believe in their ability to control their cognitive ability and place a lot of emphasis on cognitive goals. This is truly an important finding considering that cognitive goals are the main thrust of educational institutions.

The environment also supported ethical and responsible behavior, according to the resilient students. This is good because the resilient students placed a lot of emphasis on being responsible and ethical. This is another area where the resilient students' environmental and self beliefs were aligned. Since preparing students to be good citizens of this country is another goal of educational institutions, this is a significant finding.

The environment provided one support that the resilient students did not believe to be important. That is the resilient students believed that the environment supported them and recognized their achievement. However, they did not believe in their ability to obtain this support or place much emphasis on this support. This is probably because they believe in their own ability to feel good about themselves. Thereby lessening their need for environmental support. This is curious because it suggests that the environment is fulfilling a need that the resilient students do not believe they have.

#### Non-supportive areas

The fact that their social environment is not supportive is a significant finding. A positive social environment can relieve stress, enhance resilience (Clark, 1991; Luthar, 1991; and Taylor, 1991), and increase academic achievement. In fact, a students' social environment has an impact on academic achievement even in the early elementary school years (Taylor, 1991). Therefore, it seems inappropriate that their social environment does not facilitate them in making friends. This is true especially since the resilient students believe in their own ability and control. Environmental support is then just one more piece in the social self-concept and goal achievement. It seems though that their resilient students are maintaining their self-concept in this area despite their environment. As their overall self-concept in this area is better than the non-resilient students.

The resilient students place a lot of importance on being happy. However, they do not believe that their environment facilitates this goal any more than the non resilient students do. This is an important finding since they also do

not believe in their ability to be happy or their control over their happiness any more than the non-resilient students do. It seems this is one area of their life where the resilient students could use some help. Happiness is an important goal to them, yet they doubt their own ability and control. Environmental facilitation in this instance could help with their overall self-concept. Perhaps it could even increase their belief in their own ability and control.

The resilient students' environment does not allow them to be self-determining. In other words, their environment does not allow them to be free to do whatever they want. This is in direct contrast to their goals because the resilient students believe in their own ability to be self-determining and they also place a lot of emphasis on being able to do their own thing. It seems that this situation is problematic. The resilient students' self-concept in this area could be strong; however, the environment does not facilitate this. The emphasis the students place on this area of their life may make them seek out other environments where they can be self-determining. It may also make them rebel against this environment somewhat in the future. It seems that their schooling environment could allow them to be self-determining over some aspect of their educational life. However, for the time being the resilient students are achieving academically.

The resilient students also place a lot of emphasis on being individuals, or being their own person. This is another goal that their environment does not support, either. It seems that the resilient students do not want to conform to societal norms, but their environment is not supporting this goal. This could also lead to a problematic situation. However, the resilient students are still achieving academically. It seems no problems are surfacing yet. It may be that their goal of resisting societal norms is indeed protective, as the societal norms for most at-risk students is school failure.

Surprisingly, the resilient students' environment does not support them helping others. This is a goal for which they think they have the ability and

upon which they place a lot of emphasis. The resilient students believe they can be trustworthy and supply others with needed information. However, their environment is not supporting this. This is waste of a valuable resource. The resilient students' environment could be utilizing their strengths in productive manner. This could help them to feel useful and a significant part of their environment.

### Control

The resilient students believe very much in their own ability to have control over their high school life. They believe in this ability even in the face of some non-supportive environmental situations. It is probably this belief that keeps them resilient (Luthar, 1991 and Werner and Smith, 1982, 1993). However, it seems that their schooling environment could facilitate this process a bit more. Especially in the areas of social life, happiness, self-determination, individuality, and helpfulness.

### Motivation

In order for a student to be motivated it is important for them to have a goal and believe they have the ability to achieve that goal and believe that the environment is facilitative of that goal. These two elements, ability and environmental beliefs, constitute the main motivational pattern (Ford, 1992). It also helps if the student places emphasis on that goal. This extra element ensures a strong motivational pattern.

In the cognitive sphere the resilient students exhibit a robust motivational pattern. That is they believe in their cognitive abilities and their environment's facilitation of goal achievement in this area. This is the ideal situation since the high school is a place of learning which includes the pursuance of cognitive goals. The motivational picture in other areas of the students' life are not as rosy.

The environment is supportive of two areas in which the students only place a modest estimate on their abilities, ethical behavior and recognition of

achievement. This makes for a moderate motivational pattern. In other words, the students are placing a modest estimate on their abilities and are not pursuing these goals as actively as their cognitive goals. It seems this environmental support may be misplaced. It may be better for the schooling environment to support the resilient students' goals to help others than to provide support and recognition for achievement.

The environment is not supportive of a number of areas in which the resilient students do believe in their abilities, however. These areas are social, happiness, self-determination, individuality, and resources provision (helping others). The motivational patterns for students in this area varies between tenacious and vulnerable.

In the social area the resilient students have a tenacious motivational pattern. They believe in their ability, but the environment is not supportive. The resilient students continue to believe in their ability to achieve social goals even with environmental obstacles. However, with environmental support their motivation could be robust in this area, firm in purpose. It seems as if the environment may be alienating the resilient students. The students however have not lost sight of their own social abilities.

In regards to happiness, the resilient students place a lot of emphasis on this goal. However, they do not believe in their ability nor their environment. Therefore their motivational pattern is vulnerable, at-risk in times of stress or pressure. Environmental support in this area could impact overall self-concept and motivation. It seems an important area for the environment to facilitate.

As far as self-determination goals are concerned, the resilient students have a tenacious motivational pattern. They believe in their own ability, yet their environment is not supportive. They are facing the environmental non-support and trying to achieve this goal. They also place a lot of emphasis on this goal. It seems that achievement of self-determination is important to them. Environmental support in this area seems wise, as non-support may

cause students to rebel or find a more supportive environment.

Vulnerable is the motivational pattern of the resilient students concerning the area of individuality. They do not believe in their own ability or environmental support. Once again it seems that the environment could be supportive in this area and change the motivational pattern to modest.

The resilient students' environment does not support their goal of helping others. Therefore their motivational pattern in this area is tenacious. They believe in their ability and place a lot of emphasis on this goal, despite of the lack environmental support. It seems that the environment could be supportive in this instance and make their motivational pattern truly robust.

### Conclusion

The results of this study show that although the schooling environment of resilient students is supporting their cognitive goals; it is not supporting other goals that these students have. These students place importance on being happy, they also have social and resource provision goals which are not supported by the environment. Environmental facilitation of these goals could enrich the resilient students' self-concept and motivation.



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## Appendix 1

Figure 1

# Conceptual Framework

## RESILIENCE

