ABSTRACT

This article is empirical research about relations between resilience, coping styles and mental health in the pilot cadets, summarizes experimental conclusions that coping styles and mental flexibility level have significantly associated with in the certain condition of control subjects; Put forward the view that flight theory of resilience level was significantly lower than students early school psychological value condition, mental flexibility level can be changed ascend through a variety of controlled variables, and as intermediary effect mental resilience can effectively distinguish between different individual.

KEYWORDS

Pilot cadets; Psychological resilience; Oping styles; Countermeasures.
INTRODUCTION

As psychological resources of resisting pressure effectively and eliminating the negative effects, mental resilience has become the hot topics in the study of positive psychology as early as the end of last century. The definition of essential connotation has been proposed by SangBiao and Yu Weinan respectively in 2005 and 2008, that "psychological resilience is ability and personality traits growing up in adversity when faced with a stressful events, keeping individual recovery and adaptation[1]". In essence, the development and change of resilience is a dynamic process. It is the process that individual can adapt to the dynamic performance of in the dangerous environment[2]. When facing a major threat, serious difficulties and adversity condition, individuals can adapt good mental performance. Generally speaking, if the individual has good resilience, when difficulties and stressful events can guarantee good adaptation, and appear the opposite maladjustment problems[3]. Therefore resilience affect individual psychological health, is an important factor in effectively coping with the pressure, the psychological elasticity can not only promote individuals to cope with stress and adapt, understand the way of dealing with the environment, but also can explore the power sources of individual survival and growth further.

Pilot cadets are in the transition period after incurred the selection, the ability level of psychological development has not yet mature, pilot cadets are facing a series of important in one's career choices in life, including how to transit from an ordinary high school students to be a fine style that has qualified politically and competent militarily can perform the duty of a soldier, soldiers defend the national security; under the condition of difficulties and setbacks to maintain good mentality and adapt to the state, strengthen resilience and coping ability, and so on. From the view of positive psychology, this study discusses pilot cadets psychological resilience and psychological health, the relationship between coping styles, understanding early school pilot cadets psychological condition, this research can improve their psychological elasticity and cultivate qualified pilot.

RESEARCH PROCESS AND METHODS

The object of study
Participants: the subjects are students in 2012 recruits, a total of 298 questionnaires distributed psychological resilience, the study takes back 298 questionnaires, 286 valid questionnaires, recovery rate was 100%, effective rate was 95.9%. At age 16, 19 years old, average is 18.05-1.57.

Research tools
(1) Resilience scale
The scale is designed by Sandra Prince-Embury compiled in 2006 and completed by three subscales of 11 factors including a sense of control, the relationship between feeling and emotional response, a total of 64 items. Control subscales including optimism, self-efficacy, and adaptive factor; Sense of relationship between subscales including interpersonal trust, social support, human comfort and tolerance factor; Emotional subscales including emotional sensitivity, emotions restorative and destructive factors. Domestic application has a good reliability and validity.

(2) Coping style questionnaire
Coping style questionnaire has a good reliability and validity. The questionnaire is composed of 62 items, including problem solving, remorse, for help, fantasy, retreat and rationalization, each items is scored by "yes" and "no" way.

(3) Statistical software
Carried out in accordance with the compilation series through the college students' psychological archives system one-time test, the data using SPSS13.0 to carry on the reliability analysis, descriptive statistics analysis, correlation analysis and t test.
RESULTS AND COUNTERMEASURES

1. The results discussed

(1) Pilot cadets enrolled in mental flexibility level

Compared with previous research theory value, l mental flexibility level of pilot cadets was significantly lower than the psychological value in the phase of the theory of resilience l, as shown in TABLE 1.

<table>
<thead>
<tr>
<th>factors</th>
<th>M±SD</th>
<th>median</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total score</td>
<td>126.11±11.80</td>
<td>132</td>
<td>7.973**</td>
</tr>
</tbody>
</table>

Note: *p≤0.05 **p≤0.01

New students psychological resilience value is lower than the theoretical value, the reason is enormous concentration of changes and a large number of stressful events from the environment.

(2) The correlation between resilience and coping styles

The basic coping ways in psychology study include: solving-problems-help"is mature coping styles that show mature personality traits and behaviors; "retreat -self accusation" belongs to the immature coping styles that show a kind of neurosis personality characteristics, their emotions and behaviors lack stability; "Rationalization" belongs to mixed type that claimed a contradictory mentality and personality characteristics of two sides. The results of the Spearman correlation analysis (see TABLE 2) show that psychological resilience and coping styles for help in the pilot cadets was significantly positively related, and was significantly negative correlation with other factors of coping styles. Questionnaire survey results indicate that students with higher levels resilience can take the initiative to adopt positive coping styles such as problem solving, help, less using self-blame, fantasy, retreat. Quite a part of the participants can face the new environment well and take the initiative to adapt to military school life, including military academy education guidance. Due to adopting the negative coping styles and low level in psychological resilience overall also caused poor mental health relatively of the partial person just enrolled, data from SCL - 90.in psychological file system proved that the results.

<table>
<thead>
<tr>
<th>Psychological resilience</th>
<th>To solve the problem</th>
<th>remorse</th>
<th>help</th>
<th>fantasy</th>
<th>rationalization</th>
<th>retreat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological resilience</td>
<td>1</td>
<td>0.531**</td>
<td>-.318**</td>
<td>0.197**</td>
<td>-.246**</td>
<td>0.102**</td>
</tr>
<tr>
<td>To solve the problem</td>
<td>1</td>
<td>-.313</td>
<td>0.415**</td>
<td>-.207**</td>
<td>-.216**</td>
<td>-.171**</td>
</tr>
<tr>
<td>remorse</td>
<td>1</td>
<td>0.334**</td>
<td>0.474**</td>
<td>0.246**</td>
<td>0.348**</td>
<td></td>
</tr>
<tr>
<td>help</td>
<td>1</td>
<td>-.152**</td>
<td>-.205**</td>
<td>-.216**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fantasy</td>
<td>1</td>
<td>0.315**</td>
<td>0.402**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rationalization</td>
<td>1</td>
<td>-.162**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>retreat</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Improve pilot cadets psychological countermeasures of elasticity

This study analyzes the relationship between resilience and coping styles in new students and verify the psychological elasticity is coping with protective factors, further illustrates the psychological resilience affect mental health, at the same time,determines the environmental adaptability of the
individual to a certain extent. Therefore, the aim is strengthen psychological resilience and adaptability of pilot cadets in education and training.

(1) **Strengthen the psychological education of elastic training**

This study found that as a dynamic development process mental resilience can psychological resilience quality reinforcement in pilot cadets enlisted education training stage.

Richardson's process model of psychological resilience (see Figure1) is the disintegration and integration process in conscious and unconscious choice in terms of resilience[^4]. This model argues that individual use protective factors and resistance to stimulation of life in order to maintain balance. If the pressure is too large, resistance is invalid, the balance will occur. When individuals have to change the original cognitive patterns (such as worldview, belief systems, etc.), experience emotions such as fear, guilt, confused. Then a experience began to integrate consciously or unconsciously, this process may lead to different results: 1) to a higher level of equilibrium, which increases the flexibility of the individual; 2) return to the initial equilibrium shape.

Due to the change of environment and the role shift of pilot cadets face a variety of source of stress, such as the great intensity of training, the change of living environment, interpersonal adaptation and so on. These life events consume the individual mental energy to a certain extent, breaking the balance between individual's physical and mental state. Individuals with higher levels of resilience can better integrate own resources and response to stressful events. For those who adapt to the slower must have the courage to face, do not fear; Secondly, to relax; Third, we need to master effective problem solving strategy.

In addition to pay attention to the mental resilience level in the early stage, it should also be extended to the different stages of learning and training (inspection, etc.), at the same time, according to the characteristics of different students in different stages of development school should give proper guidance on coping strategies.

![Figure 1: Process model of psychological resilience](image)

(2) **Make the students master the adaptive strategy**

In the face of stress events, to adopt what kind of way to solve the problem for individual different impact of mental health. In this study, students deal with problems and strategy of events has
certain difference, difference is embodied in different ways and on the differences in the levels of mental resilience. To solve the problem, asking for help and rationalization of positive coping strategies can reduce the energy consumption of individual psychology, this also is in entering need to guide the strategy of strengthening education stage. For the retreat and fantasy coping styles should be strengthen through the collective education and individual, group counseling to help students with positive attitude to face and adapt to the new environment.

(3) Attention to improve students' self adaptability

After 3 months of individual groups by means of retrospective research conducted interviews, found that the self-accusation, fantasy, retreat and negative coping styles showed a trend of decline when the second interview, new students will be able to more actively take effective measures to cope with stress. Of their roles and positioning have re-evaluated by cadres, faculty. Retrospective study conclusion that enlightenment we focus on the students ability to repair itself is the key to develop their positive psychological.

In the future the school should pay more attention to the cultivation of students' autonomy and self management ability, pay attention to the role of the self-efficacy. This study proved from the group level at the beginning of the school, in this stage students psychological level is low, in reaction to the phenomenon, can be carried out in the study group training, pay attention to the students in active participation in the process of the flexible level. Self-adaptation ability for students is a crucial task in any stage of development, it can help students have effective ability to meet the requirements of flight activities.

(4) Development students effective social support system

Many previous studies have found that the same pressure situation is different for the impact of different individuals, who backed by higher mental or physical than those who are less likely to support more and good social support can improve the resilience of military academy students in a more positive attitude to face life's problems\cite{5}. In different stages of development, give students strategic guidance, helping them establish positive and healthy relationship. As a result, in the work to guide them as much as possible to build a good social support system, help their emotional state stable.

REFERENCES