

Effective Intervention of Flight Psychological Crisis of Flight Students Based on "Psychological Torsion" Theory

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Abstract: The psychological crisis of flight students is closely related to psychological torque. There are usually four kinds of stress sources generated by psychological torque: conflicts of values, conflicts between expectations and realization possibilities, conflicts with others, and conflicts with coping problems. Through the analysis of the formation of psychological torsion of flight students, effective intervention measures are taken for different stressors to reduce or eliminate the psychological torque of flight students, and to greatly reduce or avoid the occurrence of huge psychological crisis events in flight and promote the physical and mental health of flight participants.

1. Introduction

Torque theory believes that torque is an important cause of suicide and mental illness, that is, "uncoordinated pressure", which is different from simple stress. Pressure is only a one-way phenomenon, as long as there is a pressure source to generate pressure, and the formation of torque contains at least two pressure sources or two opposing social experiences. Torque is the state of psychological imbalance caused by the existence of two opposing conflicts of ideas in the same dimension, also known as "uncoordinated pressure". It is an important indicator for predicting psychological crisis [3]. The pressure of two or more opposing concepts or social experiences internalized in individual psychology, that is, the cognitive and psychological experience of a person when encountering conflicts and making decisions. If one cannot give up any of these concepts, it will produce psychological Pain, constitutes a psychological torque.

In recent years, the vicious incidents caused by psychological problems of civil aviation pilots have occurred one after another. The crash of the German wing aircraft has killed 150 passengers. The mental health problem of pilots has become the focus of the civil aviation industry and the whole society. The ICAO survey shows that the proportion of mechanical factors in aircraft accidents is getting smaller and smaller, and the flight accidents caused by human factors account for 60% to 80% of the accidents [1]. Therefore, for the aviation workers, the importance of the pilot's mental health and physical health is of equal significance. The Employee Assistance Program (EAP) is a major form of effective prevention and management of stress that has been applied internationally for many years. In the face of the increasing psychological pressure and psychological problems of current pilots, this paper outlines the necessity and exploration practice of implementing EAP in the flight team.

2. The reason why the pilot produces psychological torque

2.1 Working pressure

The ever-changing flight environment requires the pilot to be quick-thinking and maintain a state of high mental stress and high concentration of energy during flight. In addition, due to the rapid development of the civil aviation industry in recent years, the demand for flight personnel has increased sharply. Various airlines have trained a large number of flight students, resulting in a serious backlog of flight attendants and co-pilots of some airlines, and the promotion competition has become increasingly fierce. After they enter the company, they immediately enter various trainings,

examinations, exams, etc. If there is a problem in any link, they will face the possibility of downgrading or phasing out. When testing their comprehensive skills, they will test their psychological endurance. Flying students are prone to two conflicting values systems, which creates psychological torque.

2.2 Family, personal reasons

In addition to special work pressures, pilots face the same family and personal problems as love, marriage, family, children's education, parental pensions, and so on. Due to the special nature of the profession and the large number of foreign flights, the pilot cannot put enough time and energy into the family and personal life like other people, resulting in the partial loss of the family role, resulting in problems such as children's education, further studies, employment, etc. It is well handled. If the pilots are not good at communication, it will lead to lack of communication, poor communication or lack of understanding by family members. It may also lead to family conflicts and even lead to failure of marriage and family, family breakdown, and bad mood [2]. Individual pilots, for various reasons, such as lack of necessary operational skills, lack of flying skills, and weak interpersonal skills, cannot quickly adapt to the needs of work, but cannot face the reality, the requirements for themselves are too high, if not achieved as scheduled Your own goals will also generate a lot of psychological pressure. As a result, the pressure from the family and work makes the living and working status of the life and the expected value far apart. If it is impossible to adjust, it is prone to psychological crisis and psychological crisis, and then it is impossible to conduct normal flight training, or even normal. For life.

2.3 Social and environmental factors

Since the "8.24 Yichun air crash", the society has paid more attention to the safety of civil aviation. The public's misunderstanding of the pilot's occupation has not attracted the attention of civil aviation practitioners and guided positively. On the contrary, in order to increase safety management, China Civil Aviation The bureau went to various airlines and then to each flight department to formulate strict incentives and penalties, which caused tremendous psychological pressure on the pilots. In addition, because the organization's incentive mechanism is not perfect enough, the psychological needs of the pilots are not fully considered or some help in working life cannot be provided, resulting in interpersonal tension.

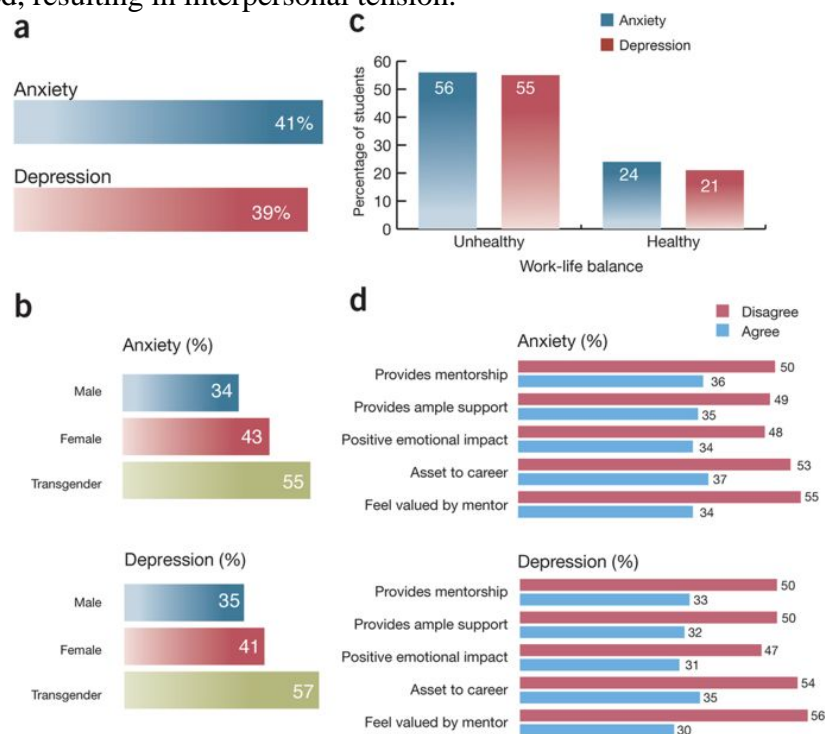


Figure 1. Survey results of the pilot's psychological crisis

3. Pilots' performance of psychological crisis

3.1 Neurasthenia

Neurasthenia is the most common psychological problem among pilots, of which sleep disorders are the most prominent manifestations. People with more severe sleep disorders can only rely on medication, so they have to do so during the medication.

3.2 Anxiety

Anxiety is a common psychological problem for pilots. It is often caused by training, modification, various examinations, examinations, etc., for different reasons, and its severity and duration are different. Individual pilots will also be accompanied by palpitation, "alopecia areata" and other symptoms.

3.3 Disgust, fear flying

Working pressure, intensity, load, responsibility, strict punishment, low pay, etc., make some pilots tired of flying. Individual flight students began to show their dislike of the flying profession when they were in the aviation school, and barely completed their studies. However, from the beginning of their employment, they showed a disgusting flight, gradually feared flying, and finally resigned.

3.4 Substance abuse

The pilot's interpersonal relationship is too singular, combined with intense and frequent flight missions. Some flight crews have chosen some inappropriate lifestyles to relieve tension, release stress, and use habitual drinking and smoking to temporarily get rid of their own troubles and predicaments purpose. There are very few pilots who take drugs to get a temporary thrill.

3.5 Depression, attack, suicide

The airlines have reported that the pilot has domestic violence, drunk driving, drinking and harassing, fighting and fighting. There have been several cases of suicide by young pilots in China. The tragedy of the "Wings of Germany" reminded us of the time to pay attention to the mental health problems of pilots, especially young pilots.



Figure 2. shows the performance of psychological problems

4. Psychological crisis and psychological intervention

4.1 Definition interpretation

In 1964, Caplan first proposed the concept of psychological crisis, that is, when a person's

dilemma exceeds his ability to withstand, there will be temporary psychological distress, this temporary psychological imbalance is the psychological crisis. American psychologist Kanel believes that the psychological crisis consists of three parts: (1) crisis events; (2) individuals feel crisis events and suffer as a result; (3) previous methods are ineffective in solving current problems, causing crisis individuals Cognitive, behavioral, and emotional dysfunction. In short, psychological crisis refers to the fact that when an individual or group is affected or challenged by certain stress events, and the previous coping style is insufficient to cope with these effects or challenges, the psychology is in a state of high tension and confusion. Psychological crisis intervention refers to a technique that provides effective help and psychological support to individuals or groups in a psychological crisis. By mobilizing its own potential, it re-establishes and restores the psychological balance before the crisis, so that it can acquire new skills. To prevent the occurrence of psychological crisis [4].

4.2 Development process

The development process of psychological crisis in emergencies can be divided into four phases according to the chronological order [5]. One is the impact period or the shock period. It means that within a few hours after an emergency, the individual is mainly characterized by anxiety, panic and unreasonable thinking, and a few people are unconscious. The second is the crisis period or the defensive withdrawal period. Because of the inability to solve the dilemma faced, it is manifested by the existence, rationalization or inappropriate projection of the problem of retreating or denying the problem. The third is the settlement period or adaptation period. At this time, we can face the reality and accept the reality. A positive approach to problem solving, reduced anxiety, increased self-assessment, and social function recovery. The fourth is the growth period. Most people become more mature psychologically and behaviorally, and get some positive coping skills, but a few people will have personality changes, or show hostility, depression, or abuse of alcohol, drugs, neurosis, mental illness and chronic physical discomfort may occur.

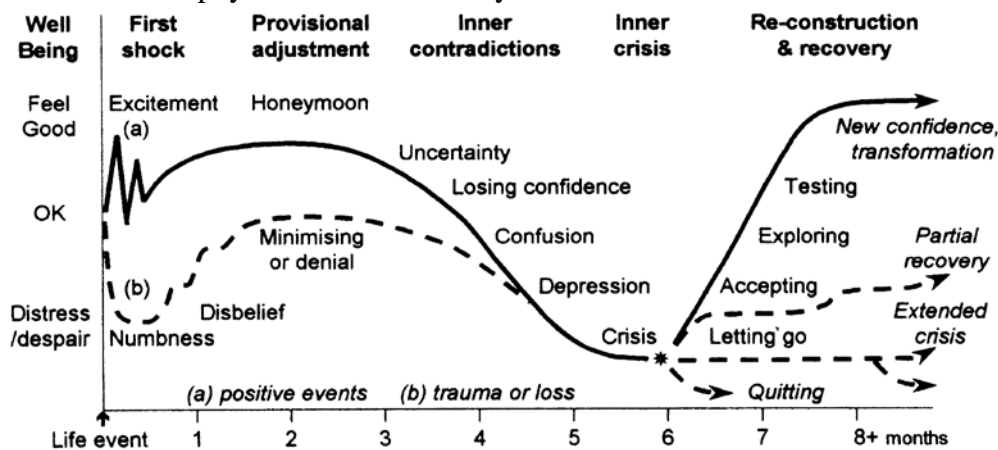


Figure 3. Psychological crisis development process

5. Constructing a psychological crisis intervention system for flight students

5.1 Psychological Crisis Prevention System

Firstly, the psychological crisis screening and early warning system. In order to fundamentally prevent the psychological crisis of flight students, the school should establish a complete psychological crisis screening and early warning system, identify and identify potential risk factors in a timely manner, and actively take preventive measures to reduce the possibility and suddenness of psychological crisis. Control the impact of possible psychological crises to a minimum. 1. Improve the psychological screening system for flight attendants and establish a mental health record. After the physical examination and new students enrolled, the specialists will conduct mental health assessment and mental illness testing, eliminates flight students with poor psychological quality or

mental illness, and focus on the flight students with psychological problems. At the same time, the mental health record of flight students is established, and the psychological changes of flight students are dynamically observed. This is the basic work of flight participants' psychological crisis intervention. 2. Establish an observation team. The team consists of flight instructor instructors, district captains and squad leaders. At the beginning of its establishment, it was trained by professional psychologists, including identifying normal psychology and abnormal psychology, how to identify flight students with psychological problems, and early detection of psychological crisis. Its main task is to observe the behavior of its flight participants at any time in daily life so as to find problems in time and keep the crisis to a minimum.

Secondly, systematic mental health education. The flight students have relatively high academic qualifications and strong comprehension ability. They can be organized by the school to regularly train the flight students on mental health knowledge such as psychological adjustment, interpersonal relationship management, physical health and establishment of positive coping styles. And pay attention to correct the discriminatory attitude of flight students on psychological issues, correctly treat the psychological problems that may arise from themselves and others, encourage them to talk to friends or family members, or actively seek the help of psychological counselors. At the same time, through group psychological development training methods, the team members' awareness, communication skills, self-confidence and anti-frustration ability can be enhanced to improve the mental health level and the ability of frustration of flight students, and reduce the occurrence of psychological crisis.

5.2 Psychological crisis emergency response system

Firstly, the crisis intervention process. Identifying the crisis from the perspective of the stressor → ensuring the safety of the stressor → actively and unconditionally accepting and communicating with the stressor → providing and verifying the way and means of responding to the crisis for the stressor → jointly developing the relief response with the stressor Radical Action Plan → Get the commitment of the stressor to implement the crisis intervention program it developed.

Secondly, psychological crisis assessment. Psychological crisis assessment plays a very important role in the whole crisis intervention process, is the premise of the entire crisis intervention, and runs through the entire crisis intervention. The assessment should be conducted by a professional psychologist and the client to select the relevant scale for mental health assessment. The scope of the assessment should be extended to the teachers and students related to the parties and events, mainly including three aspects. 1. The severity of the crisis, including the emotional state, behavioral function and cognitive state of the client; 2. Available resources, i.e. alternative action plans, coping mechanisms, support systems and other resources available to the parties; 3 The possibility of self-injury or injury to a flight student who has been determined to be severely affected by a stressful event shall be temporarily suspended to ensure safe teaching.

6. Case study

As one of China's state-owned backbone air transport groups, an airline has a large fleet of flying aircraft. The psychological problems that are common among civil aviation pilots also exist in the company's flight team [6-7]. The airline attached great importance to the professional mental health management of flight personnel and began the exploratory application of the EAP project. The EAP project is led by the Party and Workers' Department of the Group, and the Air Traffic Control Department of the Joint Stock Management Department is implemented in detail. It will work with the Party Engineering Department, the Training Center, the Feipei (Research Institute), the Flight Department and other departments to select a brigade of the Shanghai Flight Department as the EAP pilot unit. Gradually promoted the establishment of the pilot EAP studio, including psychological counseling room, music relaxation room, catharsis room, team studio. The studio works with professional agencies to provide advice and assistance to flight crews in need, allowing pilots to relieve psychological stress, relieve or relieve tension, and effectively restore calm.

In order to let pilots, know more about EAP, the Department of Aeronautics and Astronautics has done a lot of publicity work in many ways, in multiple ways and in multiple channels. These include online promotion platforms such as flight network, E-OFFICE system, APP platform, offline promotion venues such as EAP studio, library, happy coffee bar, promotional publications such as brochures, posters, series of books, etc. A poster is required to be changed every quarter. Since August 2015, a series of professional trainings have been organized, mainly for aviation physicians, flight officers and volunteers. Two special training courses are held every month. At present, 10 training sessions have been completed and more than 600 trainers have been trained. The development of EAP work includes the use of APP health platform, the opening of psychological hotline, special lectures and a series of mental health education, psychological testing and counseling, psychological interviews, and psychological care. At present, more than 20 lectures have been successfully held, with more than 1,500 flight personnel, 1300 psychological tests, more than 100 individual psychological interviews, and 56 psychological counseling sessions.

In order to alleviate the flight fatigue of the pilot, relax the mood and promote physical and mental health, the ISI Department of Aeronautics and Astronautics cooperates with a travel company to formulate a recuperation plan according to the characteristics and requirements of the flight personnel, and has launched several "team rehabilitation". The Shanghai Flight Department pilots were organized to conduct collective recuperation. Within one year, the team was organized to recuperate 8 batches, with 238 participants, including 43 family members. Aviation physicians organize group entertainment activities in nursing homes or health care centers, hold aviation psychological seminars, face-to-face interactions with pilots and family members, and relax and entertain in the process of recuperation.

7. Conclusion

Civil aviation pilots are a special occupational group. The workload and work pressure of pilots are higher than that of ordinary people. The requirements for the psychological quality of pilots are naturally higher than that of ordinary people. Excellent psychological quality is a crucial factor for pilots to ensure flight safety. Pilot mental health is an important guarantee for flight safety. At present, the psychological crisis intervention system of flight students is still in its infancy, and airlines must also clear information channels, enhance the awareness of psychological crisis prevention, and improve the psychological quality of flight students to avoid major psychological crisis events.

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