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**ANXIETY AND COPING MECHANISMS**

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*Abstract*

The anxiety is one of the most disturbing affective states. There is a very thin line between the normal fear (caused by an object or a situation, helping the person face the danger), existential anxiety (coming from facing the everyday changes in the environment), anxiety (the free-floating fear without an object), anguish (term used by the psychoanalysts specially to describe a prolonged and intense anxiety, all consuming), and panic (the most intense anxiety, leaving the person exhausted in a very short period of time). As every moment comes with something new, the person develops coping mechanisms: mechanisms that help her face the everyday challenges. Some of them are effective in dealing with anxiogenic experiences, and some not, leaving the person vulnerable to the dysfunctional aspects of this affective state. The aim of our research was to study the association between anxiety (state or trait) and different coping mechanisms. Our hypothesis was that lower anxiety is associated with a higher use of proactive and problem centered coping, and lower use of coping by avoidance and social support. The methods we used were: psychometric (The State-Trait Anxiety Inventory, The Proactive Coping Inventory, and COPE) and statistical methods. The results confirmed the general hypothesis, and also revealed a strong negative association trait anxiety and reflective coping, and a positive one between state anxiety and preventive coping. Conclusions: development of personal resources (proactive coping), especially solving problems and reflection may act as a protective factor in front of transforming normal fear into anxiety.

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**Keywords:** Anxiety, avoidance coping, proactive coping, problem-focused coping, social support.



## **1. Introduction**

### **1.1. Anxiety**

There is a very large body of scientific literature dedicated to anxiety, both volumes and empirical studies. It is related to fear, an emotion lived when a person is facing a stressful factor. In this context, the emotion corresponds to the subjective experience of having the personal integrity threatened, leading to the 'fight or flight' reaction, and, as any emotion, it is situational: It only lasts as the stressful factor acts upon the human being. As the human being is a semi-opened system, in order to exist it needs both to make exchanges with the world, and also to have firm boundaries to maintain integrity and specific structure. We must also take into consideration that a person's awareness field is limited, and thus there are many stressful agents which act upon her without her being aware of, and thus, without being able to mobilize coping strategies. The organism is equipped with mechanisms to face the stressful factors at different levels: from a totally unconscious one (in the form of the immune system) to highly conscious ones (like problem solving by applying high order cognitive mechanisms like imagination and hypothesis testing, feed-back and feed-forward mechanisms, anticipation by inductive reasoning and acquiring new resources and developing new abilities or refining existing ones in the form of preventive or proactive coping). So, there is a very thin line between the normal fear (caused by an object or a situation, helping the person face the danger), existential anxiety (coming from facing the everyday changes in the environment), anxiety (the free-floating fear, without an object), anguish (term used by the psychoanalysts specially to describe a prolonged and intense anxiety, all consuming), and panic (the most intense anxiety, leaving the person exhausted in a very short period of time). A sort of internal tension is also lived also when a person has a need that hasn't been gratified for a while, as it signals an internal deficit, and the need to take some action into the environment in order to reestablish the internal equilibrium and maintain internal organization. So, the person also must connect with the environment in order to reduce internal tension (Perls, 1965). The strategies/mechanisms employed by the person to connect with the environment and also to face its challenges are called coping mechanisms. A related term is that of defensive mechanisms, implying a threat to the internal organization, term Freud (2000) came up with to name the mechanisms used by the person against her internal impulses, when the environment does not allow need gratification, either from a biological, or especially by a social point of view. The defense mechanism involves delaying gratification or some type of action which allows manifestation, but not gratification. The prolonged use of defense mechanisms would lead to internal accumulation of tension (in the form of anxiety) and to keeping the internal impulse far from the awareness field, thus further impeding its gratification. We may say that a person uses a defense mechanism when she fails to use coping mechanisms, and assume that she uses her energy in order to avoid the contact with the environment because she perceives something in the environment as being a higher threat to her internal organization.

Thus we may speak of state-anxiety to refer to affective state of fear, lived here and now, and of trait-anxiety as the tendency to experience fear.

### **1.2. Coping strategies**

The theories concerning stress reaction, fear or anxiety being a part of it, have become more and more complex involving self-assessment and anticipation mechanisms, awareness of self and environment,

contextualization and constant interaction with the environment (social, cultural, natural or spiritual) (Hobfoll, 1989; Lazarus, 2011). The modern approaches try to move the accent from the threat the contact with the environment may represent to the personal resources which help in establishing equilibrium between connecting with and detaching from the environment. Different forms of coping strategies may be used in this line, as Greenglass, Schwarzer, Jakubiec, Fiksenbaum, and Taubert (1999) mention. The reactive coping is the effort to face a past or present stress factor in order to accept or compensate the hurt or the loss by compensating loss, wound soothing, goal adjustment, identification of benefits and the search for meaning. It needs resiliency, optimistic beliefs or the capacity to overcome obstacles or blockage. By reflective coping, the person still deals with a possible future stressful situation by simulating and contemplating multiple behavioral alternatives, and imagining their effectiveness. It includes action like brainstorming, hypothetical action plans making, analyzing problems and resources. Preventive coping is used to face potential stressors likely to be encountered by anticipation and preparation before the stressors develop fully. The stressors may be perceived as a threat according to prior knowledge or anticipations. Strategic planning refers to the generation of a goal oriented schedule of action with manageable components of an extensive action. Problem-focused coping involves using problem solving strategies (thinking) in order to deal with the challenge defined as a problem, while emotion-focused coping involves expressing the emotion lived when dealing with it. The person might also appeal to others for regulating her emotions when using emotional-support seeking coping mechanisms (like comforting or soothing). As an elaboration of the “fight or flight” reaction, avoidance coping mechanism is meant to keep the person out of the reach of the potentially stressor, but it also may disturb the contact with it, necessary for need gratification in the long term.

Proactive coping is used not as coping with a stressful situation, but as acquiring and developing personal resources, which may, at some point, be useful.

Some peculiar forms of coping have been found to be religious coping (starting from the development of a personal perspective over life expressed in the form of belief, but also involving ritual, in order to access it) and humor (the tendency to concentrate on the funny aspects of a stressful situation, as laughter has been found to be have benefic effects on the organism).

Bachmann and colleagues (2018) highlight the need to address the persons’ coping strategies in relation with anxiety and depression in patients in an early stage of oral cancer, as they have found that one third of the participants in their study reported intense anxiety and depression, and an important group with underdeveloped clear coping strategies. Sanscartier, Edgerton, and Roberts (2018) suggest interventions to instill more productive coping mechanisms in persons with gambling issues. Gambling was found to be a coping strategy in the skill-based persons as a source of thrill, and in the extensive gamblers for the excitement and social relationships, or a way of dealing with anxiety, depression, and low-self esteem in chance-based gamblers gambling. Anxious militaries were characterized by lower self-esteem, higher dysfunctional coping and greater perceived stress before a competition, and greater activation markers, mental fatigue and increased sympathetic activation resulting in sleeping fragmentation post-exercise, as the physical fatigue level was the same as in non-anxious militaries (Tanguy et. al., 2018).

## 2. Problem Statement

In the framework proposed by recent theories of stress, which tend to change the focus from the automatic reactions to more elaborated action strategies, it would be useful to investigate which from the known coping mechanisms is negatively associated with anxiety, both as a state, and as a trait.

## 3. Research Questions

The use of a coping mechanism refers to employing a specific type of action involving several psychological mechanisms on long-term, and our concern was whether there are associations between certain types of coping with higher or lower anxiety as a state or as a trait.

### 3.1. By referring to the known coping mechanisms, we have been trying to answer the following questions:

- Is the higher use of avoidance coping associated with lower state anxiety or trait-anxiety?
  - Is the higher reliance on social support associated with lower state anxiety or trait-anxiety?
  - Is reactive coping specifically associated with state anxiety or trait-anxiety?
  - How is the preventive or strategic coping related to state-anxiety? But with the trait-anxiety?
- Is proactive coping specifically associated with state-anxiety or trait-anxiety

## 4. Purpose of the Study

The aim of our research was to study the association between anxiety (state or trait) and different coping mechanisms.

Our hypothesis was that lower anxiety is associated with a higher use of proactive and problem centered coping mechanisms and lower use of coping by avoidance and social support. As proactive coping involves developing different resources to be used in facing the everyday challenges, we anticipated that the persons relying on it are ready to overcome them with less anxiety. Also, being aware and able to solve problems, the stressful situations are confronted consciously, and less by involving emotional response. This would be more in the form of satisfaction associated with the success. We have also anticipated that by using others in different ways in order to face stressful situations, the person may become dependent upon them and more anxious then dealing with it by themselves.

### 4.1. Specific Hypothesis

There is a negative correlation between state anxiety and problem-focused coping.

There is a negative correlation between trait anxiety and proactive coping.

There is positive correlation between trait anxiety and coping by seeking emotional support.

There is a positive correlation between trait anxiety and avoidance coping.

There is a positive correlation between state anxiety and avoidance coping.

There is a negative correlation between trait anxiety and problem focused coping

## 5. Research Methods

In order to test the hypothesis, we used a correlational study, including psychometric and statistical methods.

### 5.1. Participants

Our research involved 108 participants (54 females, 53 males) with ages between 18 and 45 years, most of them students at the University of Pitești from different social and real specializations, and their friends. Their participation was voluntary and anonymous.

### 5.2. Instruments

*State-Trait Anxiety Inventory* (Spielberger, 2007, STAI) is comprised of two 20-item self-report scales measuring state-anxiety (a transitory psychobiological emotional state or condition which is characterized subjective, consciously feeling and thoughts related to tension, apprehension, worry and nervousness) and trait-anxiety (individual differences in anxiety proneness as a personality trait, or the general tendency to experience anxiety). It was adapted on Romanian population by Pitariu and Peleașă. The internal consistency was .92 for state-anxiety and .94 for trait-anxiety, on Romanian population.

COPE (Carver, Scheier, & Weintraub, 1989, trad. Crașovan & Sava, 2013) is a questionnaire which measures 15 different coping strategies. The 60-item instrument was adapted on Romanian population by Crașovan and Sava (2013). 12 of the strategies were divided into four factors as follows: emotion-focused coping (positive interpretation and growth, restraint, acceptance), problem focused coping (planning, active approach, deletion of concurrent activities), social-support coping (instrumental support, social support and expressing emotions), and avoidant coping (denial, mental deactivation, and behavioural deactivation). In addition, religious approach, humour and substance use were considered. The alpha Cronbach coefficient for the 15 scales is between .21 (mental deactivation), and .93 (emotional-support seeking), with a mean value of .74.

*The Proactive Coping Inventory* (Greenglass et al. 1999, PCI) was developed to assess different approaches to coping using seven subscales (proactive coping, preventive coping, reflective coping, strategic planning, instrumental support seeking, emotional support seeking and avoidance coping) on a sample of 248 Canadian students, and then tested on a 144 Polish-Canadian adult sample. The subscales have a high internal consistency (alpha Cronbach coefficients ranging from .71 to .85 for all seven subscales).

### 5.3. Procedure

The questionnaires were administered by the researchers on voluntary basis.

## 6. Findings

### 6.1. Results

The descriptive characteristics of the score distributions on each scale are presented in Table 01.

**Table 01.** Descriptive characteristics for each variable

Variable	Mean	Standard Deviation
State anxiety (STAI)	36.12	10.99
Trait anxiety (STAI)	38.17	10.11
Problem-focused coping (COPE)	33.71	5.66
Emotion-focused coping (COPE)	32.28	4.77
Social support coping (COPE)	30.30	6.60
Avoidance coping (COPE)	22.96	6.41
Proactive coping (PCI)	42.87	6.93
Reflective coping (PCI)	31.54	5.77
Strategic planning (PCI)	11.73	2.91
Preventive coping (PCI)	26.77	5.52
Instrumental support seeking (PCI)	21.84	5.13
Emotional support seeking (PCI)	15.09	3.09
Avoidance coping (PCI)	6.78	2.19
Religious coping (COPE)	8.51	3.54
Humour (COPE)	9.37	3.34
Substance coping (COPE)	4.94	2.23

Table 02 shows the correlation coefficients (Pearson) for each coping strategy in relation to state-anxiety, and trait-anxiety, and the significance level. We will use it to discuss the confirmation of our initial hypothesis by the data we have collected.

**Table 02.** Correlation coefficients for Anxiety as state, and for Anxiety as trait with each coping strategy

Coping strategy/mechanism	State Anxiety	Trait Anxiety
Problem-focused coping (COPE)	$r=-.266, p=.005$	$r=-.240, p=.012$
Emotion-focused coping (COPE)	$r=-.057, p=.559$	$r=-.191, p=.047$
Social support coping (COPE)	$r=-.062, p=.526$	$r=.163, p=.091$
Avoidance coping (COPE)	$r=.256, p=.008$	$r=.350, p=.000$
Proactive coping (PCI)	$r=-.453, p=.000$	$r=-.510, p=.000$
Reflective coping (PCI)	$r=.177, p=.067$	$r=-.207, p=.032$
Strategic planning (PCI)	$r=-.219, p=.023$	$r=-.188, p=.051$
Preventive coping (PCI)	$r=-.284, p=.003$	$r=-.098, p=.313$
Instrumental support seeking (PCI)	$r=-.121, p=.231$	$r=.010, p=.915$
Emotional support seeking (PCI)	$r=-.153, p=.114$	$r=-.114, p=.240$
Avoidance coping (PCI)	$r=.077, p=.431$	$r=.172, p=.240$
Religious coping	$r=.057, p=.559$	$r=.095, p=.074$
Humour	$r=-.047, p=.631$	$r=-.204, p=.034$
Substance coping	$r=.112, p=.250$	$r=.189, p=.050$

The first hypothesis was confirmed, the data indicating a statistically negative association between problem-focused coping and state-anxiety. The fourth hypothesis, also referring to state-anxiety, was only partially confirmed, a positive correlation between state-anxiety and avoidance coping being significant only when assessed with COPE. The association was not significant for the same scale of PCI. As for the trait anxiety, there was a highly significant negative correlation with proactive coping (second hypothesis), and with problem-focused coping (sixth hypothesis). Trait-anxiety was not significantly associated with coping by seeking emotional support as measured with both PCI, and COPE (data did not confirm the third hypothesis). It had a significant positive correlation with avoidance coping strategy as assessed with COPE, but not with PCI (partially confirming the fifth hypothesis). There were also significant negative associations between trait-anxiety and humour, reflective coping, and emotion-focused coping.

## 6.2. Discussions

The significant negative correlation between problem-focused coping and state anxiety shows that the experience of anxiety in the present is negatively associated with activities like planning, deletion of concurrent activities and an overall active approach to stress factors. Indeed, higher anxiety involves setting in motion mostly automatic, unconscious strategies to face challenges, but the present research shows that problem solving processes, involving superior cognitive mechanisms, are not as active as when the person lives a less intense fear. Indeed, more intense or frequent state-anxiety is associated with more frequent use of denial, mental deactivation or behavioural deactivation. It seems that when highly anxious, a person deactivates superior psychological cognitive mechanisms (like interpretation, problem solving, memory or imagination), relying more on primary cognitive mechanisms (like sensation, perception). The avoidance scale of PCI that was not correlated with state-anxiety was only three item-long, referring to delaying action in a challenging situation: as there is no availability for action, it is uncertain whether it will be performed or not. Lower trait-anxiety, meaning a lower propensity to experiencing anxiety in general, was associated with higher use of proactive coping and problem-focused coping. A higher use of coping mechanisms like planning, deletion of concurrent activities (allowing concentration on the present task or challenge), and an active attitude is encountered in persons with lower tendency to experience anxiety. Denial, mental deactivation, and behavioural deactivation were also positively associated with trait-anxiety, but not delaying action. It may suggest that the person may take action at some moment, but the action following does not take into account the data of the present situation. This may result in less efficient, flexible actions in facing every day challenges, contributing to further anxiety. We left for the end the highly significant negative association of proactive coping with both state- and trait-anxiety. The use of proactive coping involves a shift of perspective on coping in general: it is not set in motion by everyday challenges, but an active process of developing personal resources to be used when the challenge occurs. Indeed, as when experiencing fear the person tends to engage in actions previously proven as efficient, somehow automatically, as previous hypothesis showed. Proactive coping comprises autonomous goal setting and goal attainment behaviour and cognition with the support of self-regulatory purposes. It allows a higher emphasis on self, and helps in building a lived sense of self-worth and self-efficiency in dealing with the demands of the environment. The finding may be relevant also in relation with the attachment theory, showing that it is important not only from a security point of view, but also from a developmental one, supporting the process of attaining higher autonomy and well-being. "Individuals scoring high on the

Proactive Coping subscale are seen as having beliefs that are rich in potential for change particularly in ways that would result in improvement of oneself and one's environment. The proactive individual is defined as resourceful, responsible and principled" (Schwarzer, 1999 as cited in Greenglass et al., 1999, p.5), and he has a lower tendency to experience fear. Acceptance, positive interpretation, and growth were not associated with anxiety in the present, but with a lower tendency to experience fear. Reflective coping, involving imagination, brainstorming, intuition, or humor is also associated with lower tendency to experience anxiety.

## 7. Conclusion

Proactive and reflective coping, humour, strategic planning imply an active approach of the world, where the person focuses on personal development (in the form of goal setting and resource acquiring) supporting personal autonomy and an internal sense of safety into the environment, thus being accompanied by less anxiety both in the present moment and in general. It seems to set in motion complex psychological mechanism, less automatic, and more centred in the present, allowing the person to be aware of herself and what she needs to function properly, and not only the potential threats. The notion of coping itself may be elaborated to include the interaction between the affective state, its awareness, and personal agency, with the affective state including more diverse information exterior and energetically supporting more nuanced, adjusted, creative actions.

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