

# Moral Attitudes of Student Youth about Social Interaction as a Factor in Life Safety

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**Abstract** The present paper aims to study the readiness of a student for constructive social interaction in relation to life safety. The sample consisted of 535 respondents from different faculties of four universities and was balanced by gender and age. It was a psychosemantic study. To collect data, the authors used the method of researching the legal identity of G. Abramensky, indicators of determining the totalitarian attitudes of T. Adorno, moral attitudes, as well as the statement related to consumer value positions. The obtained results are presented by factor analysis. Assumptions about the normal distribution were tested using the Bartlett's statistical criterion from the mathematical statistical package SPSS 14. The obtained factor structure revealed the prevalence in the student's environment of consumeristic, authoritarian and destructive ideas, along with guidelines for constructive interaction in society, civil position on human rights, and responsibility for life safety. Five groups of students were united around different positions: ambivalent moral attitudes; archaic feudal-vassal set attitudes; healthy moral position; selfish antisocial position; anxiously distrustful attitudes. This outlines the tendency to the negative impact of the so-called human factor on the activities carried out by specialists on life safety both in the workplace and in emergency situations.

**Keywords** Constructive Social Interaction,

Psychosemantic Analysis, Accidents, Production, Human Factor

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## 1. Introduction

This study was prompted by the fact that in the information space there are always a large number of articles about disasters and accidents at work, accidents on public transport, as well as reports of poisoning of workers with harmful substances in the process of performing their routine professional duties, destruction of entire buildings due to a gas explosion in the apartment, forest fires caused by carelessness or irresponsibility, etc. In search of an answer to the question why this happens, we got acquainted with the activities of specialists in life safety (various emergency, fire safety, rescue services, etc.), which allowed us to conclude that this industry is provided with a decent list of algorithms for creating a safe living environment, as its activities are aimed at changing behaviour and culture in the process of managing safety in the workplace [1], it organised management practices for creating safe organisations [2], developed manuals based on understanding human error [3, 4], and created a risk management system for

organisational accidents [5, 6].

It is known, that the life safety is a comprehensive system of knowledge about the quality and safety of products and services, safety of buildings, structures, utilities and working conditions, fire and environmental safety, etc. But the most important thing is the implementation of appropriate means and measures to create and maintain healthy and safe living conditions and human activities both in everyday life and during emergencies. Instead, we must state the fact that very often man himself becomes the main source of danger when the famous human factor comes into play, namely, psychological unpreparedness for concerted action in the face of threat, arbitrariness, irresponsibility or submission, indifference and negligence.

Over the last twenty years, scientists from different countries have studied and analysed the human factor as a factor in life safety, primarily in understanding human capabilities, and then applying this knowledge to design equipment, tools, systems and work processes. The human factor can use input from many disciplines (design, engineering, psychology, management) and is considered a mixture of engineering and psychology. The field of research of human factors is focused on the following four areas: improving security; error reduction; increasing comfort; and increasing productivity [7-14].

A.R. Hale [15] described the functions of organisational culture, conflicts, management in non-bureaucratic organisations, safety audit and safety in the educational organisations. The author has considered how the safety of life in the organisation is affected by the fact that people know what they believe, but there is no evidence they can be wrong, and also that the problems in the coming years have not been solved. S.A. Gyekye [16] conducted a study of the relationship between job satisfaction on the safety climate, and studied the relationship between job satisfaction and compliance with safety management policies and the frequency of accidents. A positive relationship between job satisfaction and the safety climate has been identified. Employees who expressed more satisfaction with their positions were positive about the security climate. Accordingly, they were more committed to security management policies and therefore registered a lower level of accidents. Thus, the results were consistent with the view that employees' positive perceptions of the organisational climate affect their perceptions of workplace safety.

Therefore, a person's readiness for responsible constructive behaviour is formed not so much as a result of students studying certain courses, but due to the influence of organisational culture of the enterprise, as well as information space with its cultural tradition and real reflection of the value of human safety. Therefore, we believe that the moral attitudes of young people and their readiness for constructive social interaction are a factor of the life safety, the basis on which safe, responsible

behaviour in specific professional activities will be built. This is a rather narrow but important question about the role of moral attitudes of young people and their readiness for constructive social interaction was the purpose of our empirical study, or rather to test this hypothesis: moral attitudes of young people and readiness for constructive social interaction is one of the factors shaping safe behaviour in professional activity.

## 2. Literature Review

Although researchers in life safety technologies often neglect the nature of relationships between people in the organisation, their moral principles, etc., but this probably still has consequences for life safety. For example, D.A. Hofmann and F.P. Morgeson [13] conducted a study on the exchange of experience between leaders of organisations in providing organisational safety support by committing to compliance with safety rules and preventing accidents by members of the organisation. The data were collected by scientists from 49 team leaders at the manufacturing plant. The results showed that, first, organisational support for compliance requirements is largely security-related; secondly, the exchange of organisation leaders significantly affects the safety in the organisation, encourages compliance and trouble-free operation. Support was also found for a structural safety communication model, with safety and accident prevention commitments. The authors outline the implications of these findings for security and social exchange research. The results of this study are important for both researchers in the organisation and for security researchers and practitioners. It turns out that organisations that provide support to their employees in order to ensure the safety of their behaviour and prevent accidents, associate them with the quality of social exchange, i.e. the exchange of those employees who are designed to monitor safety compliance. These findings suggest that the nature of social exchanges in organisations plays an important role in understanding people's behaviour related to security, and the nature of relationships between leaders plays an important role in ensuring employee safety [13].

Among the studies on occupational safety systems, J.K. Wachter and P.L. Yorio [17] are particularly noteworthy, with the overall aim of developing an idea of a safety management system, testing its relationship with objective safety statistics, and exploring how these practices work to prevent accidents due to the involvement of workers. The authors obtained results that indicate that:

- 1) there is a possibility of a significant negative relationship between the availability of individual safety management practices, as well as a component of these practices with a degree of failure;
- 2) there is a significant negative relationship between the level of emotional and cognitive interaction of

the safety-oriented employee and the level of accidents;

- 3) safety management systems and the level of employment can be used individually to predict the level of accidents;
- 4) safety management systems can be used to predict the level of workers' employment;
- 5) employees involved in safety management act as intermediaries between the safety management system and safety results (such as the level of accidents).

However, the authors warn that although the availability of safety management systems is associated with incident reduction and may be a necessary first step in accident prevention, safety effectiveness also depends on the cognitive and emotional involvement of safety-oriented workers [17].

Consider another interesting study aimed at analysing the role of the human factor in industrial safety, but at the level of organisational culture. F.W. Guldenmund [8] examines three approaches to safety culture in terms of their basic concepts of culture and organisational culture. Since culture is an intangible, vague concept that encompasses acquired assumptions that are shared by group members and that give meaning to their perceptions, behaviour and actions of others, according to the scientist, the main assumptions that form the essence of culture are common and unwritten beliefs, which are subtly manifested in the visible world. According to security researchers, the concept of culture lacks considerable depth and subtlety, and it falls into the category of behavioural and other visible characteristics, regardless of the significance that these characteristics may actually have, and are often filled with normative overtones. F.W. Guldenmund [8] noted that by combining three approaches, we will be able to resurrect the concept of safety culture and strengthen its analytical capacity in understanding the development and implementation of security management systems.

Therefore, we must recognise that employees contribute their beliefs, values and visions to the business process, and ultimately to the implementation of security management systems, in particular, the individual employee interacts with the security management system, regardless of whether it is an active or passive element. However, not all beliefs and attitudes of employees are formed in the work collective. A significant role in the formation of world outlook attitudes of occupational safety and life in general is played by the socio-cultural information space in which people exist. The most important in this case, in our opinion, are moral attitudes, ideas about human rights, or vice versa – legal nihilism and selfish consumer attitude to the world. It is this layer of social ideas of modern students that has become the object of our study.

### 3. Materials and Methods

Researchers in the humanities are often interested in filling the semantic basis of the message with specific socio-cultural content. The objects of study of social psychologists are often social phenomena that have a significant affective component, the latter are often hidden from the eyes of the observer, not always perceived by the subject and therefore not included in research models as a fixed quantity. Being a borderline phenomenon, convertible both in the social environment and in the psyche of the individual, the affective component requires the design in the field of research of the postulates of psychology and semantics. The sphere of their intersection is described in psychology – by personal meanings, in semantics – by meanings. The works of V.F. Petrenko [18], A.G. Shmelev [19], and C.H. Osgud [20] provide a comprehensive justification that the construction of subjective semantic spaces that reveal the most important factors by which the individual performs an unconscious categorical analysis of a social phenomenon, is such a method. It allows to some extent to solve the problem of studying the deep structures of the human psyche, largely responsible for regulating its behaviour in society. Experience with the use of psychosemantic methods suggests that they can be used to build a variety of systems of determination, to reach different social communities, revealing emotionally rich, poorly structured ideas about themselves and other people, about various social values and, in general, about objects, the attitude to which is deeply personal.

The study took place in the 2019-2020 academic year at Lviv Polytechnic National University. The empirical study involved 535 students from different faculties, from first to fifth year, who live and study in different cities of Ukraine (Kyiv, Ivano-Frankivsk, Lviv, Chernivtsi), including 272 male and 263 female students aged 17-22, 163 of them were students of V. Stefanyk Precarpathian National University (71 male and 92 female); 148 students of Lviv Polytechnic National University (116 male and 32 female); 144 students of B. Hrinchenko Kyiv National University (46 male and 98 female).

The specially calculated structure of the sample and its volume (535 respondents from different faculties of these universities, balanced by gender and age) is representative and allows us to talk about the social attitudes of university students in both western and central parts of Ukraine. The selection of statements to the questionnaire (n = 32) was carried out in accordance with the main purpose of the study, the content of statements was selected so that in general the questionnaire reflects the setting of public morality, and would allow to identify the level of other dominant attitudes in the mass consciousness.

The choice of indicators that correspond to other social attitudes was carried out according to the following

methods: “Method for studying the legal identity of G. Abramenkova”; “Method for determining the totalitarian guidelines of T. Adorno”, and also used the statements that relate to consumer values. All statements of the questionnaire on the attitudes of public morality were formulated as a result of focus groups with students on the problems of life safety in professional activities in the course of studying the course “Psychology of Work” in the bachelor’s programme.

The findings are presented using factor analysis. The basis for the use of factor analysis was generally the normal distribution of test measurements of the subjects. Assumptions about the normal distribution were tested using the Bartlett’s statistical criterion of sphericity from the mathematical statistical package SPSS 14 [21, 22]. Factor analysis identified six factors, the total variance of which is 57.49%. To determine the fact of statistical dependence between these factors and some characteristics of recipients, the method of two-dimensional analysis was used with the implementation of the  $\chi^2$  test, the creation of conjugation tables and clarification of statistical criteria for them. The results of the analysis showed that the factors correlate with these characteristics. Thus, the great significance of the criterion  $\chi^2$  ( $p < 0.01$ , in some cases  $p < 0.1$ ) is determined by the fields of contingency tables.

## 4. Results and Discussion

Factor 1 – legal nihilism and consumerism (contribution to the total variance is 18.7%). This factor includes statements that are indicators of different attitudes, sometimes even diametrically opposed. They characterise a group of students who have not yet formed a stable position in social interaction. On the one hand, they believe that true happiness is freedom from wealth and lust for it, and benevolence and true obedience are the path to it. On the other hand, they support the assertion that modesty is a path to oblivion and, in the end, agree that it is more important for a person to earn well than to work in the specialty. They do not consider the deliberate detention of borrowed, found, fraud in trade, inappropriately low wages, speculation, corruption, waste – as a theft. At the same time, they share the following authoritarian guidelines: we do not need laws, but honest leaders who can be trusted; decent people should ignore those who have bad habits and manners; if someone has problems or worries, it is better not to think about it, but to do more pleasant things.

After all, they favour the most destructive components of legal consciousness: each person must take care of his own life, protect and defend his security and freedom from other people by any means; no one is obliged to take care of those people who do not know how to take care of themselves; those who do not have the ability, or must

obey those who know how to live, and follow them in everything; the law must be applied differently to different categories of people. It can be argued with a high degree of probability that a group of students united by such attitudes are not very inclined to constructive social interaction and cooperation for the safety of life.

Factor 2 – moral and constructive interaction in society (contribution to the total variance is 8.9%). The allegations included in this factor belong to the precepts of public morality and describe people who believe that human trafficking and enslavement are a violation of human dignity and contrary to morality; information transmitted to the media must be in the service of truth and goodness, and the authorities must protect and uphold true and fair freedom of information; if the state exceeds its powers, oppresses citizens, then they, must protect their rights and the rights of fellow citizens within the limits established by law; family life is a preparation for life in society, and therefore must be an environment of solidarity and responsibility. The responders love, respect and honour their parents and are responsible to and for them. And also, these people stand on the fact that at the slightest suspicion in a crime, the person should not be considered responsible, guilty and should be treated accordingly. It can also be argued that the group of people united by the allegations included in this factor has a healthy civil position on human rights and is ready for constructive interaction in society on issues of life safety.

Factor 3 – ambivalence of moral consciousness (contribution to the total variance is 7.2%). The statements included in the third factor describe students who share consumer attitudes in society, namely that those who humbly adhere to moral norms are doomed to a poor standard of living, that various moralising discussions are a relic of the past. They note that it is usually easier for them to wait until the problem is resolved by itself. However, they are quite demanding of others, as they consider the deliberate detention of a loan, fraud in trade, inappropriately low wages, speculation, corruption and waste to be a theft.

Factor 4 – archaic feudal-vassal attitudes (contribution to the total variance is 6.7%). This factor surprisingly combines allegations of moral precepts, totalitarian precepts, and a counter-legal position. Students who agree on this factor believe that true happiness is freedom from wealth and greed for it. Friendliness and true obedience are also considered as the path to happiness. At the same time, they believe that respect, authority and obedience are the most important traits that children should learn. And this group shares the view that everyone should have rights corresponding to what they were born in, in what family, in what social group. Thus, among all moral precepts, obedience is chosen, children must be taught obedience, and human rights are determined by its origin. It is not surprising, therefore, that safety provisions are often followed at the behest of management rather than

based on personal awareness of the need for such safety measures.

Factor 5 – healthy moral position (contribution to the total variance is 5.9%). The statements included in the fifth factor describe students who recognise the need for the integrity of society and the interdependence of people, moral education and moral development. They believe that the erroneous conception of human freedom gives rise to a total absence of authority; the real freedom is based on moral education; from envy is born hatred, slander, joy over the misfortune of others and dissatisfaction with happiness; all those who have power and use it for good must be respected and honoured.

Factor 6 – selfish antisocial position (contribution to the total variance is 5.7%). The statements included in this factor describe people who do not recognise the following moral imperatives: everyone should feel respect and honour to those who have power directed to people and society for good; respect for national traditions and ideals strengthens a person, gives him confidence in his path; the truest testimony is the testimony of one's own life; every human life, from the its conception until its death, is sacred: no one, under any circumstances, can appropriate the right to it (neither harm nor kill); as a citizen of the state, a person has the right and duty to cooperate with the authorities for the good of society in the spirit of truth, justice and freedom; to love the homeland. These people do not feel respect for human life, culture, citizenship or power, they reject the public morality.

Factor 7 – anxious and suspicious attitudes (contribution to the total variance is 4.3%). The statements included in this factor describe students who believe that strict discipline is of utmost importance for modern youth, and also that at the slightest suspicion of a crime, a person should be considered responsible, guilty and treated accordingly. They strongly disagree that if someone has problems or worries, then it is better for not to think about it, but to do more pleasant things. But they do not support the opinion that a businessman and manufacturer is much more important to society than an artist and professor.

## 5. Conclusions

The factor structure obtained during the study reflects the dominance of contradictory attitudes of young people about their readiness for constructive social interaction for the sake of life safety. It can be said that in the minds of students, most have consumeristic, authoritarian and destructive ideas, because the very statement that is an indicator of the principles of legal nihilism and consumerism were among the first factors. This is not surprising, because the information space is dominated by deceptive advertising, constant scandals in political shows, family quarrels in reality shows and endless series with infantile populist or criminal stories. All of the above does not contribute to the formation of moral awareness of

public safety and constructive interaction in the modern students. On the contrary, the viewers are convinced that aggressive social self-assertion, disregard for the weaker and indifference are necessary for safety and survival. But the second group of students was united by the attitude towards constructive interaction in society, a healthy civil position on human rights, responsibility and safety of life.

The third group of students combined ambivalent moral attitudes, since we are talking about people who are condescending to their shortcomings, but are very strict in assessing the shortcomings of the environment. The fourth group of students were united by attitudes that can be called feudal-archaic, since they choose obedience to the leadership as the main strategy of behaviour, they believe that, above all, children should be taught obedience, and the rights of others should be determined by their origin and social status. The fifth group of students was united by a healthy moral position, recognition of the need for the integrity of society and the interdependence of people, moral education and moral development. The sixth group of students was united by a selfish antisocial attitude, which was manifested through the denial of such moral imperatives as respect for national traditions, inviolability of human life, rights and responsibilities to cooperate with the authorities for the good of society, people's desire for justice and freedom. The seventh group of students was united by anxiously distrustful statements, such as to find a person guilty at the slightest suspicion, insisting that modern youth needs strict discipline, but they believe that not only businessmen and manufacturers are important to society, but also artists and professors.

In the presence of such mental attitudes in most personnel, their reactions to the actions of life safety specialists aimed at introducing labour safety technologies are reduced to formal observation. It is not surprising, therefore, that life safety regulations are often followed at the behest of management rather than based on personal awareness of the need for such safety measures. Beginning in the spring of 2020, in Ukraine, in the context of the Covid-19 epidemic, we can observe how selfish consumerism, legal nihilism and authoritarianism are being implemented in practice. People ignore the rules of social distance and the face-mask requirements, despise and humiliate those who dare to insist on social security conditions, but quickly cover their faces in case of police control.

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