

**Abstract of a doctoral dissertation on the topic:
“The link between subjective well-being and mimicry on the example of
Almaty students’ youth”, presented for the degree of Doctor of Philosophy (PhD)
in the specialty “6D050300 - Psychology”**

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General description of work. The dissertation is devoted to the study of the subjective well-being (happiness) phenomenon and the mechanisms that stimulate it. This problem is one of the priority values at the state level of any progressive country and in the field of psychological science. Analysis of the subjective well-being (hereinafter referred to as SWB) concepts allowed establishing a huge variety in its understanding and the ambiguity of its structure, as well as its stimulating mechanisms. An analysis of the mechanisms allowed emphasizing mimicry as the most effective mechanism that stimulates SWB. In this regard, the work is devoted to the study of the mimicry effect on the SWB.

The relevance of the research topic. The problem of the SWB facilitation is the prerogative of all progressive countries and, accordingly, there different types of projects that aimed to solve this problem. Among them are the Global Wellbeing Study (Gallup World Poll, covering 132 countries), the World Health Organization, the World Values Survey organization, which includes 52 countries, the projects “Ruhani Zhangyru”, “Tugan zher”, “ Densaulyk ”in Kazakhstan. These projects and programs are aimed to support social well-being of citizens of various sectors of the state, especially the socially vulnerable and the young generation, as the driving force of society and the future of the country. All projects are characterized by tangible material investments and long-term period, which implies the need for affordable and minimally costly psychological technologies to improve SWB.

An analysis of the SWB problem allows us to state its significance in psychological science from 1916 to the present day. However, studies are characterized by wide scatter both in understanding the phenomenon itself and its structural components, the mechanisms stimulating it. In this regard, the systematization and integration of SWB understanding, as well as the justification of the structure and mechanisms that stimulate it is becoming relevant. An analysis of the mechanisms that facilitate SWB revealed their significant diversity, among them: imitation, identification, modeling, mimicry, which actualizes the need for a comparative analysis and identification of the mimicry specifics. Mimicry as one of the effective mechanisms

that facilitates SWB is being a scientific gap that requires precise study. Mimicry is one of the mechanism that stimulates SWB in the interaction process, and based on principle of “here and now”. The necessity of youth’s SWB facilitation who is opened for new technologies and experiences requires development of effective and affordable psychological techniques that will optimize SWB in a short time period.

The degree of problem development in the science. The problem of happiness has been actualized since 1916 in various areas of foreign classical psychology. In the psychoanalytic direction, happiness was studied in the framework of the pleasure principle (Freud S.). In humanistic as a pleasure, defined by the fruitful ways of social interaction (Rogers C.). In individual psychology, happiness is defined as an experience of a sense of unity, as a peak of experience (Adler A.). In existential psychology - as the realization of the values, creativity, experience (Frankl V.). In behavioral psychology, happiness is defined as satisfaction with life, determined by the achievement of results-oriented goals (Watson J., Bandura A., Rotter J., Cummins R., Schwarzer R., Jerusalem M., Coleman J., Haller M., Hadler M., Myers D., Ikiz F., Cakar F., Kim J., Lee C., Ji M. et al.).

In cognitive and cognitive-behavioral psychology, SWB is defined as the experience of positive emotions provided by the functioning of brain activity, information processing and emotional intelligence (EI) (Davidson R., Campbell A., Parkinson B., Dfarhud D., Scherer K., etc.).

In positive psychology, happiness is intrapersonal harmony, determined by personality traits, with the defining role of optimism as a positive perception of the situation and future, positive thinking and mood stimulating productive ways to achieve happiness (Csikszentmihalyi M., Seligman M.E.P., Diener E., Diener M. , Emmons R., Proyer R., Berthold A., Ruch W., Gollwitzer PM, Wadsworth T. et al.).

In Soviet psychology and psychology of the post-Soviet space, studies of happiness began in 1980 and defined SWB as the satisfaction of needs provided by the system of activities Kronik A.A., Dzhidaryan I.A. Russian psychology is presented by the works of Leontyev D.A., Shevelnikova T.D. and Fesenko P.P., Vinichuk N.V., Spring E, B., Shiryayeva O.S. and others. Kazakhstani psychology defined happiness as intrapersonal harmony (Saparova I.A., Tashimova F.S., Rizulla A.R., Polyvyannaya N.V.). However, no empirical studies of the SWB have been conducted so far, including depending on the mimicry.

Thus, a theoretical analysis allowed to identify various approaches to understanding SWB (table 1).

Table 1 - Comparative analysis of the SWB (happiness) studies in different directions of world psychology

The SWB definition in different branches of psychology		
Definition of SWB (happiness) in psychology of preexperimental stage	Soviet psychology and psychology of the post-Soviet space	Happiness is an intrapersonal harmony associated with the realization of the values and the meaning of life (Kronik A.A., Dzhidaryan I.A., Saparova I.A., Tashimova F.S., Rizulla A.R.), as an optimal vitality (Leontyev D.A.) and satisfaction with life.
	Classical foreign psychology	SWB is an experience of pleasure: associated with the libido energy transformation (Freud S.), with the unity of the mind and body (Adler A.), fruitfulness (Fromm E.), peak of the experiences (Maslow A.), and the realization of relationship values (Frankl V.).
Definition of subjective well-being (happiness) in different areas of experimental psychology		
The experimental stage of SWB study	Behavioral psychology	SWB as life satisfaction with life - provided by awareness of the effectiveness of achievements and harmony in relationships with others
	Cognitive psychology	SWB as a harmony of intrapersonal processes associated with experiences of positive emotions provided by the features of the functioning of the brain and information processing
	Cognitive Behavioral Psychology	SWB as a harmony of intrapersonal processes associated with experiencing positive emotions provided by emotional intelligence.
	Positive psychology	SWB as a harmonious internal state determined by a positive interpretation of circumstances, internal control, perception and evaluation of events and the ability to find an internal balance

In the result of analysis and integration of the SWB concepts in different areas of world psychology, we proposed indicators of SWB (table 2).

Table 2 - Indicators of SWB (happiness) structure in different areas of world psychology

1	2
Soviet psychology and psychology of the post-Soviet space	Values and meaning of the life (Kronik A.A., Dzhidaryan I.A., Saparova I.A., Tashimova F.S., Rizulla A.R., Polyvyannaya N.V.); resources (Leontiev D.A.); satisfaction with life (Vinichuk N.V.)
Classical foreign psychology	Pleasure, creativity, overcoming
Positive psychology	Satisfaction with life is a cognitive and affective assessment of life, provided by awareness of the measure of the effectiveness of achievements and harmony in relationships with others.
Cognitive psychology	Positive emotions are the experience of positively colored emotional states that stimulate the harmony of intrapersonal processes.
Cognitive and behavioral psychology	Emotional intelligence includes recognition, evaluation, expression and regulation of emotions that stimulate harmony both within the human system and in relationships with others.
Positive psychology	Optimism is a positive perception of the situation and the future, positive thinking and attitude, the ability to stimulate productive behavior and harmony in oneself and others.

Based on the concepts' analysis, the author formulates the definition of subjective well-being as an integrative phenomenon, determined by a harmonious internal state, provided by life satisfaction, optimism (cognitive component), positive emotions, and emotional intelligence (emotive component), which reflect the structure of SWB.

Further, the author systematizes strategies for achieving happiness in different areas of psychology: 1) harmonization of relationships: hedonism, asceticism, transformative activity (A. Kronik); 2) optimization of social relations and the value-semantic aspect of being (Dzhidaryan I.A., Saparova I.A., Tashimova F.S. et al.); 3) libido energy management (Freud S. and others); 4) the pursuit of excellence (Adler A.), self-actualization (Maslow A.); 5) the formation of "correct behavior" (J. Watson and others); 6) improving the life quality (Skinner B. et al.); 7) work on the internal locus of control (Rotter J.); 8) activation of certain areas of brain activity, the hormonal system (Ashby F, etc.); 9) optimization of information processing processes, creativity (Frederickson B. et al.); 10) optimization of the positive and effective interpersonal relationships that ensure emotional contagious, awareness of external evaluation (Parkinson B and others); 11) stimulate positive social relations (Clark L., Watson D., etc.), hobbies, significant activities (Estrada C., Isen A., Young M. et al.); 12) spiritual work and dialogue with God (Ellison S. et al.).

All these approaches are characterized by a long-term implementation perspective and material investments. One of the mechanisms that characterized as a time saving and effortless is the mimicry, which was introduced by social psychology (Chartrand T. and Bargh J., 1999), and allows significantly optimizes the process of interpersonal interaction.

How does mimicry differ from such mechanisms as: copying, imitation, identification, modeling, and whether they are synonymous to each other? Copying defined as the reproduction of human behavior and activities (following the example), aimed at mastering the social experience of mankind and the formation of personality for a long period, in the course of a lifetime (abu-Nasr al-Farabi, 1973; Tard G., 1892); in foreign psychology: Freud S. (1921), Rogers C. (1957), Siegel E. (1995); in Soviet psychology: L. Vygotsky (1983), Rubinstein S.L. (1989), Leontiev A.N. (1948), A. Kovalev (1960); in social psychology: Proetskiy V.A. (1958, 1974), Andreeva G.M. (1999), Parygin B.D. (1999); in child psychology: Zaporozhets A.V. (1986), Lisina M.I. (1948), Bozhovich L.I. (1968), Elkonin D.B. (1978); in Russian psychology- Antipenko O.E. (2013, 2017). Vygotsky L.S. emphasized that copying is one of the main paths in the cultural development of man. However, the copying phenomenon itself needs to be explained.

Imitations as an emotionally charged reproduction of general patterns of using things and patterns of communication in the process of child development (Obukhova L.F., 1998; Gorbatenko T.I., 1957; Novoselova S.L., 1997; Identification as an assimilation in the process of which the others' value are adopted that ensure the development of personality (Mukhina V.S., 2017), formation of the values in the process of human life (Basina E.Z., 1985; Tashimova F.S., 1995, 2001, 2010), value-

oriented unity groups (Petrovsky V.A., Petrovsky A.V., 1992). In contrast to mimicry, these mechanisms were studied in general, on the basis of the activity and subjective approaches from the perspective of consciousness. They are considered as mechanisms that have been functioning for a long time, implicitly, for granted, they cannot be measured and fixed, which does not allow us to speak about reliability. That the study of these mechanisms served only as a prerequisite for the study of mimicry in the future. Thus, they are not synonymous. A more likely prerequisite for the study of mimicry is modeling as a reproduction of the most productive methods of interaction that stimulate human self-efficacy in the process of life (Bandura A., 1977), which characterizes the second stage of research in behaviorism.

Actually, mimicry research begins in foreign psychology in line with the interbehavioral direction (Kantor J., 1974), the main subject of which is the analysis of the interaction system in interpersonal interaction. Interactions should be fixed at a certain period of time and observable. Unlike behaviorism, aimed at the processes of learning the correct behavior, interbehavioral psychology focuses on the harmonization of interpersonal relationships, consisting of many interactions, from which the interpretation of events is derived. In this regard, for the study of mimicry, the phenomenon of the coincidence of behavior as the similarity of the body postures and actions in interpersonal relationships (Schefflen A., 1964; Bernieri F., Reznick R., Rozenthal R., 1988) and the mechanism of synchronization characterized as the same behavior in a certain rhythm and time, leading to a sense of connection between the participants in the interaction (Bernieri F., Rozenthal R., 1991; Pikoovsky R. et al., 2003; Richardson M. et al., 2007). In contrast to the previous mechanisms, mimicry is an observable act of behavior that occurs in a certain period of time, and can be fixed during the process (Chartrand T., Bargh J., 1999). Summarizing various approaches of mimicry understanding, the author formulates the concept of mimicry as a conscious and unconscious copying of verbal and non-verbal acts of behavior in the interactions that are observable and fixed in interpersonal relationships, and occur in a certain period of time. There are different types of mimicry among which are verbal, behavioral, facial, emotional (Chartrand T., Bargh J., Kulesza W., Neumann R., Strack F. et al.).

Why do we suppose that mimicry is the most effective mechanism that increases the SWB? Analysis of studies has established that mimicry: 1) stimulates the development of personality, providing the experience accumulated by mankind in the process of interpersonal relationships (Barr R., Metzoff A.); 2) stimulates the positive perception of the other and sympathy in the process of interpersonal relationships (Chartrand T., Bargh J.); 3) stimulates trust (Swaab R., Maddux W., Sinaceur M.); 4) increases altruism (van Baaren R., Holland R., Kawakami K.); 5) contributes to financial success (Kulesza W. and colleagues, Jacob C., Gueguen N. and colleagues); 6) physical attraction (Gueguen N.); 7) promotes productive social adaptation (Chartrand T., Bargh J.); 8) is a predictor of marriage satisfaction (Zajonc R. and colleagues); 9) develops a sense of safety (Dijksterhuis A.); 10) stimulates prosocial behavior (Kurzius E., Borkenau P.). Nevertheless, there are some negative

consequences of mimicry, such as: 1) mimicry increases sense of unity (conformism) and thus decreases diversity and creativity (Ashton-James C., Chartrand T.); 2) may reduce self-esteem (Kot S., Kulesza W.).

Based on the mimicry benefits that maintain positive aspects of interpersonal relations, we suggest that mimicry is a potential resource for SWB. In this regard, this dissertation aimed to identify the link between mimicry and SWB on the example of students' youth, as the most progressive social group, which is sensitive to new interaction technologies.

The purpose of our study is to investigate the effect of mimicry as an observable and fixed conscious and unconscious copying of verbal and non-verbal acts of behavior during the interactions on SWB.

The object of the study is the Almaty students' youth SWB.

The subject of the study is the link of integrated indicators of SWB and mimicry in the process of the interaction from the perspectives of the mimicker and the mimicked, on the example of student youth in Almaty.

Research tasks:

- 1) Conduct a theoretical analysis of SWB concepts, factors and mechanisms that stimulate it in various areas of world psychology.
- 2) Conduct a theoretical analysis of the mimicry phenomena, identify and differentiate mimicry from copying, identification, imitation and modeling, as well as analyze the genesis of the mimicry research, the role and function in the interaction process, as well as its capabilities in stimulating the SW of a person.
- 3) Experimentally determine the link between mimicry and SWB indicators in the observed and recorded interaction, as well as in the process of practical implementation of mimicry, taking into account personal characteristics (extraversion/introversion) and gender.
- 4) Identify the effect of the mimicry tendency on SWB indicators of the mimicker in the process of the observed interaction.
- 5) Select and justify research methods, form the experiment design.
- 6) Conduct a qualitative and quantitative analysis (two-factor ANOVA analysis of variance, repeated measures analysis of variance, factor analysis, multiple regression analysis, comparative analysis of nonparametric data according to the Mann-Whitney criteria; SPSS 24) of experimental data. Formulate practical recommendations for improving SWB.

Research hypotheses. General hypothesis. We hypothesize that mimicry facilitates subjective well-being of the students.

Private hypotheses:

- 1) There is a hypothesis that the SWB is determined by integrated four indicators, such as: life satisfaction, positive emotions, emotional intelligence and optimism that maintain the affective and cognitive components of SWB.

- 2) According to our hypothesis the specificity of the mimicry phenomenon manifests in fixed and measured interactions, characterized by instant effects and, accordingly, is not equal to the mechanisms of copying, imitation, identification and modeling.
- 3) We hypothesis that one interaction with mimicry stimulates positive emotions, optimism of the mimickee (whose behavior is copied) and facilitates his/her sympathy of the mimicker (an experimenter who copied gestures, body postures and facial expressions).
- 4) We hypothesis that the practice of mimicry in daily life facilitate: (a) positive emotions; b) emotional intelligence; c) optimism; d) life satisfaction of the mimicker.
- 5) We hypothesis that people with a high tendency to mimicry: a) experience more positive emotions; b) have a higher emotional intelligence; c) are more optimistic; d) have a higher level of life satisfaction than people with a low tendency to mimicry.
- 6) We hypothesis that mimicry equally stimulates the SWB of the mimicker and the mimickee, regardless of extraversion and introversion and the gender.

The theoretical and methodological basis of the study was the following approaches: theories of optimism (Smith T. and colleagues, 2013), the principle of complementarity (Sadler P., Ethier N., Woody E., 2011), the introspective paradigm and the theory of the SWB construct in positive psychology (Lyubomirsky S., Diener E, 2005); theory of positive emotions (Frederickson B., 2001) in cognitive psychology; theories of emotional intelligence (Cherniss C., Goleman D., 2001) in cognitive-behavioral psychology; the interbehavioral approach (Kantor J., 1974), the mimicry concepts (Chartrand T., Bargh J., 1999; Kulesza W., 2015; Ashton-James C., 2009; Gueguen N, 2009) and the principles of mimicry study (Chartrand T. , Bargh J., 1999; Kulesza W., 2015) in the framework of behavioral and interbehavioral psychology.

Research methods: interdisciplinary complex analysis, comparative analysis, experimental method and empirical research using the following methods: 1) The scale of positive and negative affect (PANAS; Watson D., Clark L., Tellegen A., 1988); 2) the self-reporting scale of emotional intelligence (Schutte N. et al., 1998); 3) a test of dispositional optimism (DOT, Scheier M., Carver C., 1985); 4) a test for determining the level of sympathy, developed by Kulesza W. et al. (2017); 5) the scale of life satisfaction (SWLS; Diener E. et al., 1985). The course and process of the experiment was recorded using a hidden video camera. The study was approved by the local ethics committee at al-Farabi KazNU and with the written consent of the participants.

Data processing was carried out using two-way ANOVA analysis, analysis of variance with repeated measurements, factor analysis, multiple regression analysis, using the Mann-Whitney U-test, Bonferroni, Lambd Wilks, Alpha Cronbach (SPSS 24).

Organization of an experimental study

The effect of mimicry on the SWB was studied from the perspective of a mimick (the one whose behavior is copied) and a mimicker (the one who copies the behavior), by measuring four variables of SWB in mimicry and no-mimicry conditions. The personality traits (extraversion/introversion) and the gender were included to the

analyses. The study of the link between SWB and mimicry consisted of three experiments.

First experiment was aimed at studying mimicker's SWB in the mimicry and no-mimicry conditions. The design of the experiment was based on the well-known experiment Chartrand T., Bargh J. (experiment 2; 1999). The 132 students of KazNU named after al-Farabi and the University of Turan were enrolled to the study.

The experiment took the form of a conversation with each participant individually, during which the experimenter mimicked or not the participant's behavior. The manipulation of mimicry included three groups that reflected the value of an independent variable: 1) Behavioral mimicry (BM), where the experimenter during the conversation copied the participant's behavior (head touch, foot shaking, facial expressions). 2) Verbal mimicry (VM), the experimenter copied and paraphrased the words of the participant. 3) No-mimicry (NM), the experimenter sat in a neutral position without copying words and the behavior of the participant.

After the conversation, positive emotions, optimism and sympathy toward the mimicker (experimenter) were measured that reflected dependent variables.

The second experiment investigated the effect of mimicry on the SWB of the opposite side, the mimicker. Participants 60 students (32 girls and 28 men) of Al-Farabi Kazakh National University and UIB University of International Business were enrolled to the study and divided into experimental and control groups that reflected an independent variable. Participants from the experimental group attended trainings for a month, where they were taught mimicry techniques and were given the task of practicing mimicry in daily life. Participants from the control group watched general educational videos and discussed them (there was no practice of mimicry). Before and after the trainings, the dependent variables: positive emotions, emotional intelligence (further EI), optimism, life satisfaction that constitute SWB were measured. The second experiment was conducted in a group format.

The third experiment was aimed at studying the influence of the mimicry tendency on the SWB of the mimicker. The participants (60 students, 39 women and 21 men) were divided into two groups with a high and low tendency to mimicry, after which components of SWB (positive emotions, emotional intelligence, optimism, life satisfaction) were measured.

The task was also to identify the most significant predictors of affective and cognitive components of the SWB from the list of variables. The variables to check the prediction of affective parts were life satisfaction, emotional intelligence and optimism, in the case of cognitive part of SWB, the variables were positive emotions, emotional intelligence and optimism. The third experiment was carried out individually with each of the participant in the form of a conversation, during which the experimenter actively showed mannerism (touching the head, smiling, changing the pose of the body and legs) in order to engage the participants in mimicry behavior and identify their tendency to mimicry. The conversation was shot on a hidden video camera, in order to measure the mimicry tendency. The procedure of mimicry tendency coding was based on fixing the

following dependent variables: a) the number of times the participant showed a smile; b) the number of times the participant touched his/her head; c) the number of times the participant changed the legs position (experiment 1 and 3; Chartrand T., Bargh J., 1999). Two independent raters, blinded to the hypothesis assessed the video on the manifestation of behaviors. The data of the raters were then checked for reliability by applying correlation analysis (SPSS 24), which showed a high correlation between the raters, $r = 0.97$, $p < 0.05$ (in this case, $p = 0.000$). In order to form an independent variable, the average value of the data of two raters was taken as the only value of the manifestation of behavior, followed by the median derivation of the mimicry tendency indicator. The median ($Me = 4$) expressed a high tendency to mimicry, data below the median expressed a low mimicry tendency. As a result, two groups ($N = 30$) of participants were formed, characterized by a high and low tendency to mimicry.

Totally, 252 participants were enrolled to the study at different stages.

Experimental Results

The first experiment revealed the significant effect of mimicry for the optimism (VM) and sympathy (BM), regardless of personal characteristics, such as extraversion and introversion. The hypothesis regarding positive emotions in general (enthusiastic, joyful, strong, interested, confident, focused, inspired, determined, attentive, active) has not been confirmed. However, it was found that verbal mimicry positively affects the feeling of strength, determination and attentiveness in both male and female participants. Statistical data reflecting the revealed effect related to strength ($M = 4$, $SD = 1.03$; $F(2, 13) = 5.677$; $p < 0.05$, in this case $p = .008$; $\eta^2 = 0.073$), in contrast to behavioral mimicry ($M = 3.43$, $SD = 0.92$) and the no-mimicry ($M = 3.27$, $SD = 1.30$). In the case of a determination level verbal mimicry had an effect ($M = 4.05$, $SD = 0.89$; $F(2, 129) = 3.513$; $p < 0.05$, in this case $p = 0.014$; $\eta^2 = 0.066$), in contrast to behavioral mimicry ($M = 3.66$, $SD = 1.01$) and no - mimicry ($M = 3.52$, $SD = 0.98$); in the case of the attentiveness in the group of verbal mimicry had also significant effect ($M = 4.09$, $SD = 0.96$; $F(2, 129) = 3.469$; $p < 0.05$, in this case $p = 0.050$; $\eta^2 = 0.051$) compared to behavioral mimicry ($M = 3.70$, $SD = 1.13$) and the no-mimicry ($M = 3.52$, $SD = 0.99$) (Figure 1).

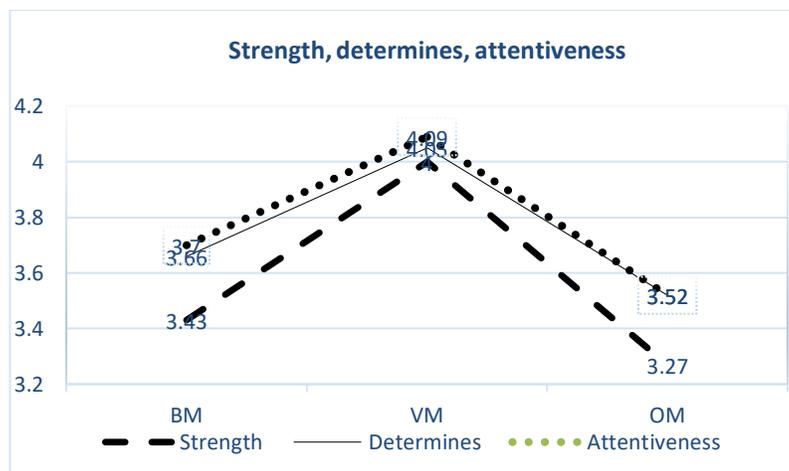


Figure 1 - Strength, determines, and attentiveness in the groups

Despite the fact that verbal mimicry equally influenced these emotions with respect to both sexes, among males they were higher than among females, the differences were at the level of statistical significance ($p < 0.05$). Verbal mimicry does not stimulate an increase in the feeling of full strength in participants with introversion, but it stimulates in extraverted participants. The influence of verbal mimicry on determines and attentiveness remains positive in relation to both orientations of the personality (extraversion and introversion).

A factor analysis of the above three emotions revealed that strength positively correlates with enthusiasm and activity. Strength is also one of the five emotions that determine the entire spectrum of positive emotions by 72%. Determines and attentiveness positively correlate with each other and with proud.

Verbal mimicry stimulated a level of optimism ($p < 0.05$; in this case $p = 0,000$), behavioral mimicry stimulated a level of sympathy toward the mimicker ($p < 0.05$; in this case $p = 0.001$) (Figure 2).

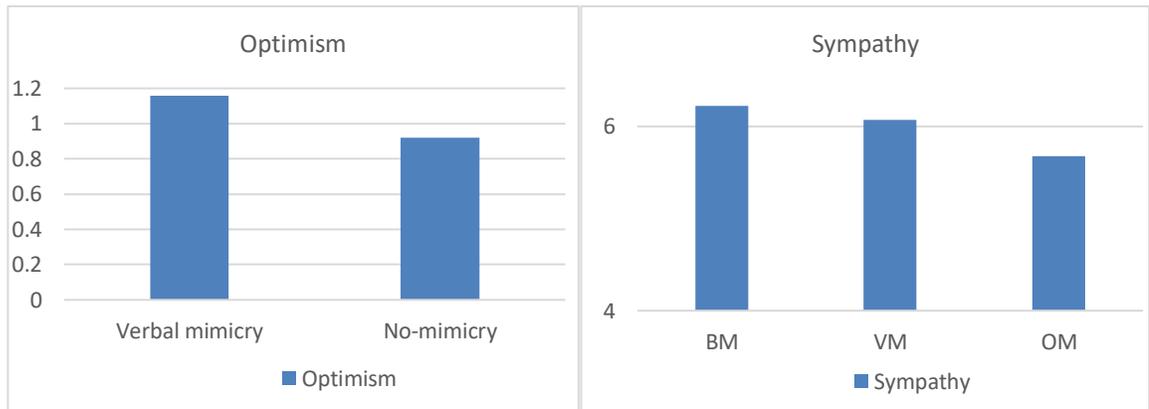


Figure 2 - Optimism an sympathy in groups

Second experiment. The results showed that participants who practiced mimicry within a month, experimental group increased the level of positive emotions, emotional intelligence, optimism and life satisfaction compared with the participants from the control group ($p < 0.05$) (Figure 3).

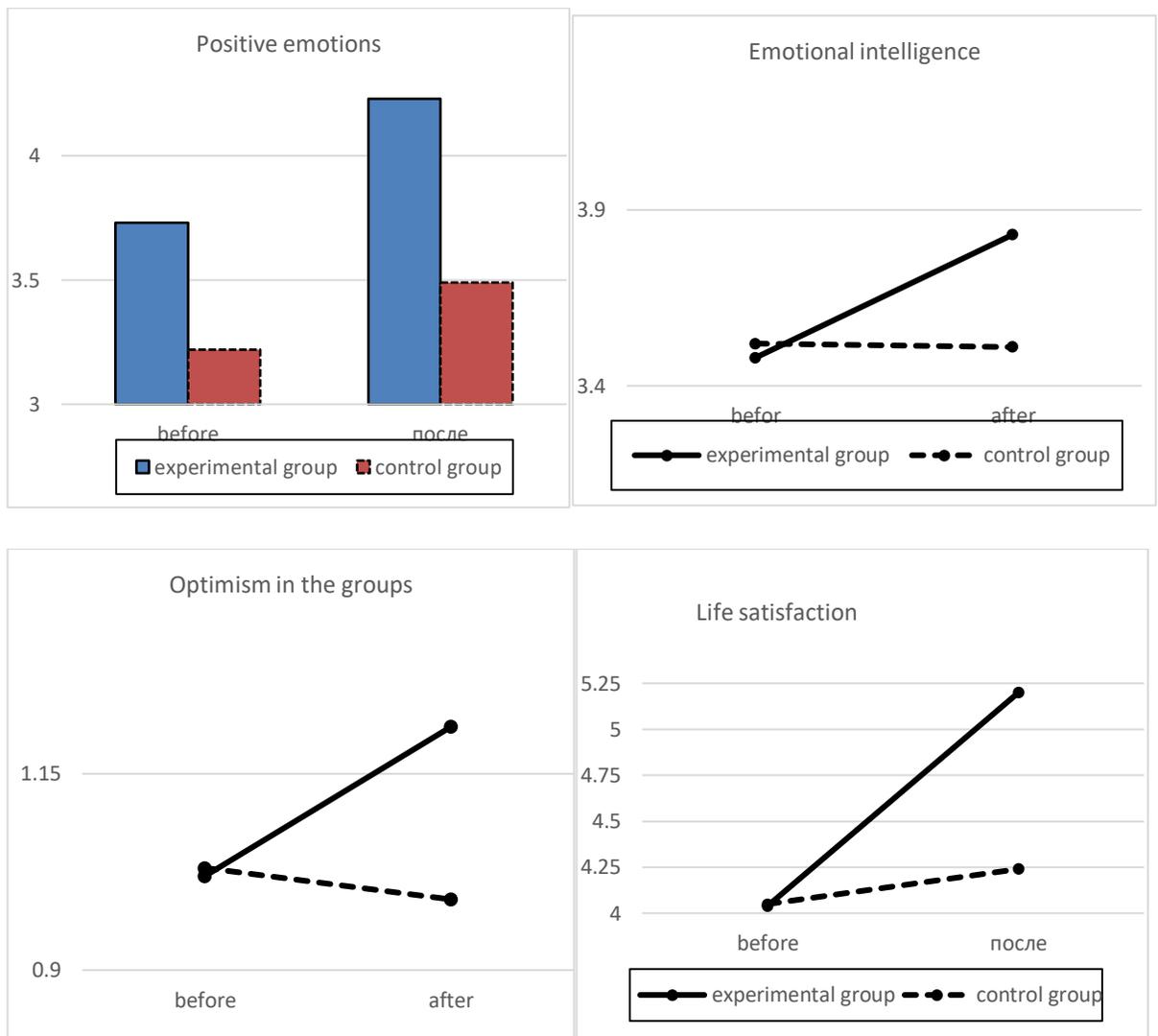


Figure 3 - Positive emotions, optimism, emotional intelligence, life satisfaction

The results of the third experiment showed that participants with a high tendency to mimicry experience more positive emotions ($p < 0.05$, in this case $p = 0,000$), have a higher level of emotional intelligence ($p < 0.05$; in this case $p = 0,000$), higher level of optimism ($p < 0.05$; in this case, $p = 0.000$) and life satisfaction level ($p < 0.05$, in this case, $p = 0.021$) than participants with a low tendency to mimicry, regardless of extraversion/introversion and gender. In addition to the fact that this effect applies to both genders (male and female), nevertheless, female participants are characterized by higher indicators of optimism, EI, and life satisfaction (Figure 4).

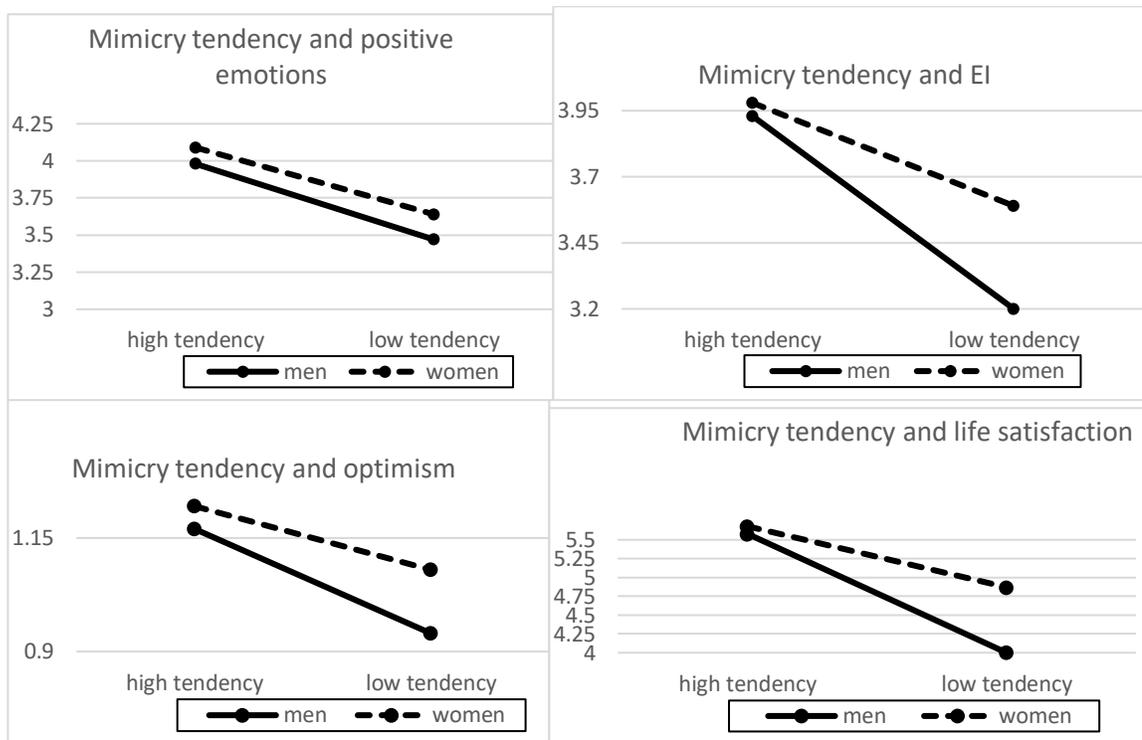


Figure 4 - Mimicry tendency and positive emotions, optimism, EI, life satisfaction

It was also found that the predictor of the affective part of SWB is EI, which determines positive emotions by 40.7% ($p < 0,000$). The predictor of the cognitive part of SWB is optimism, which determines life satisfaction (cognitive component) at the level of 39.3% and has a significant statistical effect ($p < 0,000$).

The scientific novelty of the study based on a comparative analysis of various concepts of SWB in a world psychology: Soviet, Russian, Kazakh; behavioral, cognitive, cognitive-behavioral and positive psychology, that allowed to propose a model SWB understanding, which is defined as an integrative phenomenon provided through predictors affective and cognitive component. The affective and cognitive components composed of life satisfaction (behavioral psychology), positive emotions (cognitive psychology), emotional intelligence (cognitive-behavioral psychology), optimism (positive psychologists), which is new in SWB understanding (table 2).

For the first time, on the basis of a comparative analysis of following mechanisms such as copying, imitation, identification, modeling, the specificity of mimicry as a conscious and unconscious copying of behavioral acts in the process of observed and fixed inter[personal interaction of the mimickee and the mimicker is revealed. A clear distinction is drawn between these phenomena.

Based on the analysis of various SWB concepts and mimicry, the link between SWB and mimicry was revealed, which was subsequently confirmed experimentally.

The predominant effect of verbal mimicry on specific emotions, such as: strength, determines and attentiveness, reflecting differences in extraverted and introvert-

oriented participants (verbal mimicry stimulated strength, determination and attentiveness in extroverts; in case of introverts, only determines and attentiveness, was experimentally established.), in contrast to behavioral mimicry and the lack of mimicry, which represents a new vision of the connection between the phenomena of mimicry and SWB.

A statistically significant effect of the influence of behavioral and verbal mimicry on the level of optimism and sympathy toward the mimicker was experimentally established.

The special importance of learning the mimicry techniques and practicing them in real life has been experimentally established, which facilitate the level of positive emotions, emotional intelligence, optimism and life satisfaction that determine the experience of happiness.

New in this study is the identification of the relationship between the tendency to mimicry and the SWB according to which, high level of mimicry tendency determines the high level of SWB.

For the first time, it was found that personality traits (extraversion / introversion) and gender differences do not affect the link between mimicry and SWB.

For the first time, methods have been developed to optimize SWB, characterized by high efficiency, minimal energy consumption, accessibility and the possibility of application in various spheres of life both by a person him/herself (educational and professional activities, social and personal life activities), and toward other people, when person can apply mimicry and thus facilitate others SWB level.

For the first time, mimicry training techniques have been developed in psychological interventions, as well as in the educational system. Mimicry techniques are easy to use and are time saving.

The theoretical significance of the study is that:

1) Justified goals, objectives, stages, directions, mechanisms, processes, effects, principles of the mimicry impact on SWB, technologies for increasing subjective well-being through the development of mimicry skills, which make a significant contribution to the development of positive and social psychology. 2) The specifics of the mimicry mechanism and its impact on the SWB variables (positive emotions, emotional intelligence, optimism, life satisfaction) are disclosed. 3) The concept of SWB as an intrapersonal harmony, integrating the indicators of the leading areas of world psychology, such as life satisfaction, optimism as a cognitive component of SWB, positive emotions and emotional intelligence as an affective component, is expanded. In addition, the specificity of the mimicry concept, which has no analogues in Soviet psychology and psychology of the post-Soviet space, as the determining mechanism of a stimulating experience of happiness, is revealed. 4) In-depth understanding of the factors and processes of stimulating subjective well-being, as well as the mimicry role in optimizing interpersonal interaction.

Practical significance. The present investigation has a crucial role in the

development of psychologically healthy and happy student youth, the achievement of which is one of the important factors in the prosperity of any state. The detailed justification of practical significance are:

- 1) Developed and successfully tested experimental method facilitating SWB can serve as the basis for the introduction of this method in the education system as one of the method of psychological support and counseling for expat students experiencing difficulties in social adaptation.
- 2) This method can be used by teachers in the education system as a form of interactive learning, aimed at optimizing the student's internal resources (strength), as well as increasing the level of attention and a clear understanding of information.
- 3) The proposed method for SWB facilitation may be used as a psychological intervention in group trainings aimed at improving communication skills, optimizing psychological resources, improving the quality of life through social skills development.
- 4) Based on this method, new effective techniques can be developed for solving specific psychological problems of the individual.

Provisions posed for thesis defense. The general provision - mimicry is one of the determining mechanisms that facilitate SWB.

Private provisions:

- 1) SWB is defined as an intrapersonal harmony, integrated by the following indicators, such as: positive emotions, emotional intelligence, as predictors of the affective part, optimism and life satisfaction, as predictors of the cognitive part.
- 2) The specificity of mimicry manifests in fixed and measured interpersonal interactions, characterized by instant effects and, accordingly, not analogous to the mechanisms of copying, imitation, identification, and modeling.
- 3) One act of mimicry increases the level of certain positive emotions (strength, determination, attentiveness), optimism of the mimicker and sympathy toward the mimicker.
- 4) The mimicry practice in daily life can increase SWB of the mimicker, characterized by the following variables: (a) positive emotions; b) emotional intelligence; c) optimism; d) life satisfaction.
- 5) People with a high tendency to mimicry have a higher level SWB (positive emotions, emotional intelligence, optimism, life satisfaction) than people with a low tendency to mimicry.
- 6) Mimicry equally stimulates SWB, regardless of extraversion and introversion, as well as gender.

The reliability of the results obtained is provided by:

1. Using a set of validated methods, as well as the valid experimental design, which meet the purposes of the study (subject, objectives and hypotheses);

2. Using the correct statistical apparatus for analyzing quantitative data (factor, analysis, two-factor ANOVA, repeated measures ANOVA, standard multiple regression analysis).

3. A representative sample that was enrolled to the investigation.

3. The study was approved by the Ethical Council of the al-Farabi Kazakh National University.

Testing the study results. The results of the dissertation research were reported at international, republican scientific and practical conferences, methodological seminars from 2007 to 2019: 1) Tashimova F.S., Rizulla A.R., Massalimova A.R., Mynbayeva A.K., Abdiraiymova G.S. Happiness understanding dependence on features of coping behavior // WASET- International Conference on Behavioral, Cognitive and Psychological; 2) Rizulla A.R. Understanding of happiness as an experience of love // Materials of a republican scientific-practical conference "Actual problems of practical psychology." - Almaty, 2012 .- P.55-59; 3) Rizulla A.R., Kabakova M.P. The mimicry peculiarities as a mechanism for successful adaptation in the society // International Conference "Innovation and Global Issues in Social Sciences 2017". - Antalya, Turkey, 2017 .- P. 846-853; 4) Rizulla A.R. Kabakova M.P. Social bonding as a way to increase person's self esteem // International scientific-practical conference "Psychological science and practice in modern society: problems, experience, prospects." - Almaty, KazNPU named after Abay, 2018 .- P. 107-109; 5) Rizulla A.R., Kabakova M.P. Psychological well-being and mimicry // Republican scientific-practical conference "Balaubaev readings 10". - Karaganda, 2018 .- P. 109-111; 6) Rizulla A.R., Tashimova F.S. Kazakh youth in search of meaning // FSBIU "Psychological Institute" International Symposium "Psychological problems of the meaning of life and acme"? Materials of the Third Kazakhstan Youth Section. - Almaty, 2018 .- P. 21-24.

The research results embedding. The main provisions of the dissertation are presented in 20 publications among which 8 are articles in the journals that are included in list of the Higher Attestation Commission, 1 article in Scopus Journal, 10 articles in international and national conferences, 1 monograph. The results of the study are embedded in the educational process.

Based on the materials of the study, trainings on stress resistance using mimicry were developed and tested at the center of Psychological Technologies and Innovations of al-Farabi KazNU, during the Republican Winter and Summer Psychological Schools (2017-2019), in trainings with undergraduates (2019), with psychologists and medical staff of the Center for Sanitary and Epidemiological Expertise, Office of the President of the Republic of Kazakhstan in Astana (2018), with medical psychologists and psychotherapists in the Almaty Regional Center for Medical and Social Rehabilitation and Psychotherapy (2019).

The structure and scope of the dissertation is determined by the purpose and logic of the study. The dissertation consists of an introduction, main body, results, and

a conclusion, the list of reference containing 318 titles and 8 appendices. The work consists of 174 pages. In the text of the dissertation there are 69 tables, 19 figures.

MAIN PART

The choice of research direction is based on the need for a psychological analysis of the link between subjective well-being and the mimicry, as well as its capabilities in stimulating the experience of happiness.

The introduction describes the degree of problem development in the science, defines the goal, tasks, object and subject of the research, reveals the scientific novelty, theoretical and practical significance of the work, formulates the provisions to be defended, provides information on approbation and publication of research results, structure and scope of the dissertation.

The first section is “The problem of subjective well-being and mimicry in various areas of psychology”, consists of seven subsections.

Subsection 1.1 “The phenomenon of happiness in classical foreign psychology (before the experimental stage of research)” analyzes of the SWB concepts in psychoanalytic, individual, humanistic and existential psychology, which define happiness as: pleasure, harmony from experiences peak, unity, relationship values, etc.

In subsection 1.2 “The Phenomenon of Happiness in Soviet Psychology and Psychology of the Post-Soviet Space,” happiness is defined as an integrative phenomenon that contributes to intrapersonal harmony provided by the value-semantic sphere, satisfaction with life and resources.

Subsection 1.3 “Life satisfaction as a determinant factor for SWB in behavioral psychology,” analyzes the studies of happiness in two stages of the behaviorism development, on the basis of which life satisfaction is justified as a determining indicator provided by a focus on the results.

In subsection 1.4 “Positive emotions and emotional intelligence as determining factors of SWB in cognitive and cognitive-behavioral psychology” In cognitive psychology, understanding of SWB was associated with experiencing positive emotions provided by an activation of certain areas in the brain, hormonal system, such as dopamine (Ashby F. and colleagues, 1999), serotonin (Mitchell R., Philips L., 2007) and oxytocin (Campbell A., 2010) and gene index (5-HTTLPR).

Subsection 1.5 “Optimism as a determining factor of SWB in positive psychology,” is aimed at analyzing studies related to stimulation of SWB referring to personal qualities, such as optimism that has a significant role in facilitation (Carver C., Gaines J., 1987; Scheier M., Carver C. 1985; Cummins R., Nistico H., 2002; et al.). Based on a comparative analysis of the SWB understanding the author deduces the definition of SWB as an integrative phenomenon provided by: satisfaction with life (behavioral psychology), positive emotions (cognitive psychology), emotional intelligence (cognitive-behavioral psychology) and optimism (positive psychology). Based on the foregoing, focuses on the mechanisms that stimulate the performance of SWB.

In subsection 1.6 “The phenomenon of mimicry as a mechanism that stimulates subjective well-being”, author conducted a comparative analysis of the mechanisms stimulating subjective well-being, on the basis of which the specifics of mimicry are revealed and differentiation between the mechanisms of copying, imitation, identification, modeling and mimicry is made.

Subsection 1.7 “Psychological characteristics of student youth and mechanisms for achieving subjective well-being” discusses the features of adolescence as a group, which is opened to new trends and technologies of interpersonal relationships.

The second section “Research methods” describes research methods and experimental design (see research methods).

The third section “Study results”. The results showed the significant effect of mimicry on SWB.

Subsection 3.1 The influence of mimicry on positive emotions, optimism of the mimickee and sympathy toward the mimicker in the process of interpersonal interaction.

Subsection 3.2 The influence of mimicry on optimism, emotional intelligence, positive emotions and life satisfaction of the mimicker in the process of practicing mimicry.

Subsection 3.3 The effect of the mimicry tendency on subjective well-being.

CONCLUSION

The results of our study confirm the main points and hypotheses, and allow us to conclude the following:

- 1) Theoretical analysis of the SWB phenomena in world psychology and various psychology directions allowed us to define SWB as an integrative phenomenon, determined by the following indicators: life satisfaction, positive emotions, emotional intelligence and optimism. Experimental studies have confirmed the effect of the mechanism of mimicry on increasing SWB indicators.
- 2) Comparative analysis of mechanisms that stimulate subjective well-being, made it possible to establish the specifics of the mimicry mechanism, which is a product of interbehavioral psychology, characterized as a fixable and functioning in interpersonal interactions that works on the principle “here and now” producing instant effects on the indicators of subjective well-being. Unlike the other mechanisms (copying, imitation, identification, modeling) mimicry is characterized by greater efficiency, which does not require financial and long - time inputs.

Summarizing the experimental study, it was found that one act of mimicry (verbal) during the interaction increases the level of optimism of the mimickee, stimulating the coherence of communication (sympathy for the mimicker in conditions of behavioral mimicry), regardless of personal characteristics (extraversion / introversion) and gender.

Verbal mimicry stimulates increasing of strength, determines and attentiveness for both men and women. Mimicry (verbal) does not affect the increase the strength in case of introversion, and vice versa, it stimulates strength in extroverts.

Mimicry practice can stimulate SWB variables' level (positive emotions, emotional intelligence, optimism, life satisfaction), regardless of extraversion / introversion and gender.

Students with a high tendency to mimicry experience more positive emotions, have a higher level of emotional intelligence, optimism and life satisfaction than students with a low tendency to mimicry, regardless of extraversion / introversion and gender. However, female subjects are characterized by higher rates with respect to these variables. The predictor of the affective part of SWB is EI, the predictor of the cognitive part of SWB is optimism, the increase in the level of EI and optimism facilitates the level of SWB.