

Positive psychology and Ikigai to treat anxiety and depression in teenagers.

Psicología positiva e Ikigai para intervenir la ansiedad y depresión en adolescentes.

Luis Fernando Jiménez-Roldán^a & Norma Angélica Ortega-Andrade^b

Abstract:

The rise of emotional disorders such as anxiety and depression among adolescents represents an urgent challenge for mental health, particularly in vulnerable populations. In response to this issue, the pilot workshop “Positive Psychology and Ikigai: Happier Adolescents” was designed and implemented as a psychosocial strategy. The objective was to preliminarily examine the possible contribution of a psychosocial intervention aimed at strengthening life satisfaction and reducing anxiety and depression levels among upper secondary students in Temascalapa, State of Mexico. The study adopted a quantitative approach with a pre-experimental pretest–posttest design. Twenty-seven adolescents between 15 and 18 years of age participated. A non-probabilistic convenience sampling method was used, and a paired-samples t test was applied. The workshop was validated by four experts in positive psychology. The results showed statistically significant reductions in anxiety levels ($M=19.88$ to $M=14.51$) and depression ($M=27.07$ to $M=18.11$), as well as a significant increase in overall well-being ($M=107.77$ to $M=119.59$). Overall, these findings suggest that this brief, structured, and culturally contextualized intervention is effective in reducing anxiety and depression levels among adolescents and enhancing their overall well-being in a school setting. Future studies employing experimental designs and longitudinal follow-ups are recommended to strengthen the evidence regarding its effectiveness.

Keywords:

Positive psychology, Ikigai, anxiety, teenagers

Resumen:

El aumento de los trastornos emocionales como la ansiedad y la depresión en adolescentes representa un desafío urgente para la salud mental, especialmente en poblaciones vulnerables. Ante esta problemática, se diseñó e implementó, en una fase piloto, el taller “Psicología positiva e Ikigai: Adolescencias más felices” como una estrategia psicosocial. El objetivo fue examinar preliminarmente la posible contribución de una intervención psicosocial orientada a fortalecer la satisfacción con la vida y reducir los niveles de ansiedad y depresión en estudiantes de nivel medio superior en Temascalapa, Estado de México. El estudio adoptó un enfoque cuantitativo, con un diseño preexperimental de pretest y posttest. Participaron 27 adolescentes de entre 15 y 18 años. Se utilizó un muestreo no probabilístico por conveniencia y se aplicó la prueba t de Student para muestras relacionadas. El taller fue validado por cuatro expertos en psicología positiva. Los resultados mostraron reducciones estadísticamente significativas en los niveles de ansiedad ($M=19.88$ a $M=14.51$) y depresión ($M=27.07$ a $M=18.11$), así como un aumento significativo del bienestar general ($M=107.77$ a $M=119.59$). Se concluye que esta intervención breve, estructurada y culturalmente contextualizada, es eficaz para disminuir niveles de ansiedad y depresión en adolescentes e incrementar su bienestar general en un ambiente escolarizado. Se recomienda realizar estudios futuros con diseños experimentales y seguimiento longitudinal para fortalecer la evidencia sobre su efectividad.

Palabras Clave:

Psicología positiva, Ikigai, ansiedad, adolescentes

^a Universidad Autónoma del Estado de Hidalgo | Instituto de Ciencias de la Salud | Pachuca de Soto, Hidalgo | México,

<https://orcid.org/0009-0001-7019-6913>, Email: ji359899@uaeh.edu.mx

^b Universidad Autónoma del Estado de Hidalgo | Instituto de Ciencias de la Salud | Pachuca de Soto, Hidalgo | México, <https://orcid.org/0000-0002-0117-2547>, Email: ortegan@uaeh.edu.mx

INTRODUCTION

The World Health Organization (WHO, 2024) defines adolescence as the phase of life spanning from childhood to adulthood, from ages 10 to 19. It represents a unique stage of human development and a critical moment to establish foundations for good health. During this period, adolescents experience rapid physical, cognitive, and psychosocial growth, directly influencing how they feel, think, make decisions, and interact with their environment. Notably, Aberastury and Knobel (1989) argue that each of these changes constitutes a form of mourning for the adolescent. They emphasize that adolescents must not only confront the adult world but also detach from childhood, navigating four fundamental types of mourning:

- 1) Mourning the loss of the child's body: This relates to physical changes as the body matures while the mind may linger in childhood.
- 2) Loss of the child role and identity: Here, adolescents contrast past dependencies on parents with emerging responsibilities.
- 3) Loss of the childhood parents: This refers to evolving relationships as adolescents seek their own identity, altering attachments and protections once provided by parents.
- 4) Bisexuality: According to the authors, this involves maturation toward sexual identity.

Accordingly, Rother (2013) suggests that this may explain why many adolescents seeking psychological counselling exhibit emotional lability and low self-esteem, along with irreverence, apathy, violence, destructiveness, lack of interest, and goal-setting deficits. They also display limited solidarity, disregard for rules, and impulsive actions. Rother adds that adolescents may experience frustration, confusion, distress, depression, and anxiety, leading to diminished motivation.

Rother (2013) also observes that adults often dismiss such behaviours as "part of their age," assuming normal family and social lives. However, adolescents may face deeper issues, perceiving life as meaningless and feeling hopeless about the future. They encounter severe anxiety and depression, feeling isolated in an unfamiliar world while assuming unprepared roles. Consequently, they may lose interest in activities, abandon studies, undergo mood swings, and prioritize fleeting pleasures.

This is particularly alarming, as Gallegos (2018) argues that if adolescents fail to navigate this stage effectively and manage depression and anxiety promptly, they may resort to harmful behaviours such as addictions, compulsive buying, eating disorders, thrill seeking, drastic appearance changes, early sexual activity, negative peer associations, joining sects or radical groups, and even suicide.

Therefore, reviewing depression and anxiety in adolescents and their implications is essential.

Depression in Adolescence

According to Cuesta (2022), depression is a mental disorder with varying severity that can become chronic. Symptoms like sadness and guilt are common, often accompanied by anxiety.

Cuesta (2022) identifies personal, cognitive, social, family, and genetic risk factors that heighten depression likelihood. Substance use as a coping mechanism is a high risk behaviour; adolescents may consume alcohol or drugs for temporary relief, but this exacerbates depression and increases suicide risk.

Tirado and Diaz (2022) emphasize rising depression and suicidal ideation. In 2021, suicidal thoughts peaked, with 80% of adolescents reporting them at some point. These are prevalent in depressive disorders. Moreover, Muñoz et al. (2021) note that depressive symptoms impair mood, affect, and other life areas, manifesting as fatigue, appetite changes, sleep disturbances, excessive guilt, cognitive difficulties, and suicidal ideation. In adolescents, depression is a multicausal problem and a predictor of other mental health disorders and social issues, making it a public health concern.

Additionally, Alzuri et al. (2017) highlight that typical depression signs such as sadness, insomnia, or low self-esteem can be masked by disobedience, arguments, substance use, and other behaviours, complicating diagnosis and allowing silent progression.

Cuesta (2022) aligns with Romero (2014) that depressive symptoms often coexist with other disorders, anxiety being most common. Studies by Romero (2014), Cuesta (2022), and Gómez-Betancur et al. (2019) on adolescents show overlapping symptoms like fatigue, concentration difficulties, insomnia, worry, and somatic complaints. However, excessive worry about future events distinguishes anxiety disorders.

Anxiety in Adolescence

Serna et al. (2020) describe anxiety as a common adolescent condition, an emotion marked by distressing thoughts, tension, behavioral and physical changes like motor agitation and maladaptive behaviors that produce distorted cognitive responses.

Chacón et al. (2021) note that anxiety serves as a physiological defense against threats, yielding unpleasant sensations such as worry, irritability, restlessness, hypervigilance, or agitation. These aid adaptation, but anxiety becomes pathological if uncontrollable and persistent.

Similarly, Arntz et al. (2022) assert that anxiety may stem from anticipated non-threats. If persistent without stimuli, it evolves into a disorder.

Guerra et al. (2017) explain that anxiety disorders hinder goal achievement, fostering insecurity, anger, or adult dependency. Physical symptoms include nausea, vomiting, constipation, sweating, shortness of breath, concentration difficulties, and nervousness, reducing quality of life and developmental adaptation.

The WHO (2024) acknowledges that adolescent health is influenced by factors including exposure to adversity, social pressure, identity exploration, media influence, and imposed gender norms. These can harm when clashing with lived realities and aspirations. The WHO (2024) adds that depression and anxiety lead causes of illness and disability in adolescents, with many deaths aged 15-19 from suicide. Half of adult mental disorders start by age 18, often undetected and untreated.

Moreover, this organization indicates that these disorders affect school attendance, studying, and performance. Social withdrawal increases isolation and loneliness, worsening depression and potentially leading to suicide.

Kieling et al. (2024) indicate that mental disorders often emerge around age 14, per Global Burden of Disease studies since the 1990s. Huamani (2021) reports that in Latin America, suicide ranks among leading causes of death for adolescents aged 13-20, per Pan American Health Organization data.

In Mexico, the Secretaría de Salud (2024) 2020–2024 Specific Action Program cites the Mexican Adolescent Health Survey (ages 12–17), finding anxiety disorders most prevalent, starting early. Their high prevalence warrants study, as adolescence is pivotal for development. Anxiety risks other disorders like depression, phobias. Mental disorders impact socially and economically.

The Instituto de Seguridad Social del Estado de México y Municipios (ISSEMyM) and Clínica de Atención al Trastorno por Estrés Postraumático (CATEP) note major adolescent morbidity and mortality from suicide, drug use, early pregnancy, and depression. Fifty percent of mental disorders begin before age 14, often undetected as "typical," leading to chronicity (as cited in Secretaría de Finanzas, 2022).

Regarding the municipality of Temascalapa, State of Mexico, it was not possible to locate information on the mental health of its population, which corroborates what Kieling et al. (2024) highlight, since in some cases there are fewer data sources available in less privileged regions and populations. This, in turn, becomes a risk factor because, as the WHO (2024) states, some adolescents are at higher risk of developing mental health disorders due to their living conditions, discrimination, exclusion, or lack of access to quality services and support.

For this reason, it is crucial to develop innovative interventions that serve as protective factors for adolescents, interventions that allow them to become aware of the risks associated with inappropriate behaviors, but above all, that help them uncover the personal tools they already possess to support themselves, their community, and others.

Based on the above, the proposal for a psychosocial intervention through the implementation of the workshop "Positive Psychology and Ikigai: Happier Adolescents" emerged. As Molina (2021) mentions, Ikigai is a method that seeks to place each person in contact and interaction with four areas: profession (what you are good at + what you can be paid for), passion (what you are good at + what you love), mission (what you love + what the world needs), and vocation (what the world needs + what you can be paid for). This allows adolescents to delve deeper into other concepts that are highly relevant and interconnected, such as values, habits, strengths, and information-seeking. Considering these aspects and clarifying their Ikigai is beneficial, as it allows them to make adequate decisions for themselves, become aware of the importance of being aligned with their own essence, and consequently experience greater life satisfaction.

Given this proposal, it is valuable to break down the Ikigai method and examine the results of its application in other contexts.

Ikigai: That which gives life meaning

García and Miralles (2016), in their excellent review of the philosophy of Ikigai, offer an etymological definition in which "iki" means life and "gai" means that which is worthwhile. They conclude that Ikigai can be defined as "the reason for being" or "the reason for existing", that is, the reason why we get up in the morning. However, it is hidden within us and requires patient exploration to reach the deepest part of our being and thus find it. Having a clear and defined Ikigai provides passion, satisfaction, happiness, and meaning in life.

Furthermore, in their work *Ikigai: The Japanese Secrets to a Long and Happy Life*, García and Miralles (2016) present a methodology that guides people step by step toward discovering their Ikigai, offering strategies to cope with stress, depression, and anxiety, as well as lifestyle recommendations. This methodology includes elements such as flowing through each task, entering what is known as a "flow state," in which one becomes so immersed in an activity that the sense of time and space fades. They also emphasize the mastery a person can acquire by dominating a skill while constantly seeking self-improvement. Healthy habits include beneficial interpersonal relationships, a balanced diet, and adequate rest.

It is noteworthy that only four studies globally have implemented the Ikigai method. The most recent is the study conducted in Ecuador by Quimbita (2023), titled "Ikigai in the Academic Performance of University Students." Its objective was to determine the influence of Ikigai on students' academic performance, finding that Ikigai does indeed have an impact: when individuals find meaning in life and have clear purposes, they perform better in any area, feeling enthusiastic and happy upon discovering what they truly love to do.

A second study from Ecuador, conducted by Yañez (2023) and titled "The Ikigai Method as an Emotional Support Strategy in Upper Basic Education Students," concluded that Ikigai positively influences individual and group activities, helping achieve specific goals and objectives.

The third related study was conducted in Colombia by Olmos (2021), titled "Audiovisual Design of a Real-Time Vertical Dance Performance: 'My Ikigai?' Applying Videomapping Techniques." Although centered on the creation of an artistic piece, the study concluded that Ikigai allows for deeper contact with dance, its forms, styles, colors, and sounds, evoking emotions and situations based on the theoretical context analyzed. The author suggests that such work encourages deeper knowledge of the artistic fields around us and promotes innovation in these constantly evolving areas.

The fourth background study is Páez's (2019) research in Spain titled "Physical Education for Happiness: From Emotional Management to Ikigai." This study aimed to promote motor-learning environments where emotionality is central to the teaching-learning process. It concluded that the project not only contributes to building physical education classes but also supports the creation of a life project, emphasizing that incorporating students' thoughts and feelings allows learning to transcend beyond the classroom and into everyday life.

Consequently, the projects that have applied the Ikigai methodology have shown positive results, demonstrating that knowledge becomes internalized when connected with themes such as love, vocation, and dedication. Likewise, an analysis of

the Ikigai methodology reveals similarities with the positive psychology model in both objectives and development. As a result, the workshop “Positive Psychology and Ikigai: Happier Adolescents” was created.

Seligman introduced “positive psychology” in *Authentic Happiness* (2002). However, it was not until 2005 that he formally established the theory, proposing within it the “well-being theory,” composed of five elements. Each element meets three properties: (1) it contributes to well-being, (2) many people pursue it for its own sake, and (3) it is defined independently of the other elements. The five elements are:

- Positive emotion: The cornerstone of well-being theory, including happiness and satisfaction.
- Engagement: The state in which a person becomes absorbed in a task, losing track of time due to experiencing flow.
- Positive relationships: Seligman highlights that little of what is positive occurs in isolation. Joy, deep meaning, pride, and significant achievements often arise in the presence of others.
- Meaning: The sense of belonging and serving something greater than oneself.
- Accomplishment: The pursuit of success, mastery, and achievement for their own sake.

Seligman (2005) asserts that the theory of well-being is grounded in these five pillars, supported by personal strengths. Well-being cannot exist solely in the mind; it is a combination of feeling good and genuinely having meaning, positive relationships, and accomplishments. The way to choose the course of one's life is by maximizing all five elements.

Thus, positive psychology aligns with Ikigai, as both focus on strengthening positive aspects of life, gratitude, optimism, mastery, meaning, and flow states. While Ikigai centers on life purpose, both frameworks share complementary goals for enhancing well-being.

Although positive psychology is relatively new, studies such as Correa et al. (2024), “Positive Psychology Applied to Basic Education Students: Reflections from Motivation,” and Riffo (2021), “Evaluation of a Positive Psychology-Based Intervention to Reduce Antisocial Behavior in Adolescents,” have demonstrated that programs grounded in this approach promote essential skills for academic and personal success while reducing maladaptive behaviors.

Both approaches, positive psychology and Ikigai are designed not only for individuals experiencing distress but also for those who are well-adjusted, as their purpose is human flourishing. This is particularly relevant within contemporary society, especially in Mexico, where there is a growing need to transition from a reparative society to a preventive one.

Therefore, the proposal for a psychosocial intervention aimed at increasing life satisfaction and reducing anxiety and depression in upper secondary students through the workshop “Positive Psychology and Ikigai: Happier Adolescents” is both relevant and crucial. The workshop integrates positive psychology techniques that help reframe the past by recognizing personal strengths, offering a more positive outlook, and reducing sadness (a hallmark of depression). It also

promotes present-moment awareness and optimism toward the future, mitigating catastrophic thinking (a hallmark of anxiety).

Simultaneously, Ikigai is implemented as an effective tool due to its visually accessible model, which allows adolescents to internalize its concepts, make adequate decisions aligned with their goals, and cultivate satisfaction in everyday life.

Accordingly, this pilot study aimed to preliminarily examine the possible contribution of a psychosocial intervention designed to strengthen life satisfaction, based on positive psychology strategies and the Ikigai method to the reduction of anxiety and depression levels among adolescents from a community tele-high school in the municipality of Temascalapa, State of Mexico.

METHODS

Research Design and Type of Study

This employed quantitative methodology with a pre-experimental pretest-posttest design to assess anxiety, depression, and well-being before and after the “Positive Psychology and Ikigai: Happier Adolescents” workshop. The study is exploratory and pilot in nature, as it seeks to obtain an initial understanding of how positive psychology strategies and the Ikigai method can complement each other within an intervention.

Participants

A total of 29 first- and fourth-semester students participated, with ages ranging from 15 to 18 years, and a mean age of $M = 16.6$ ($SD = 1.73$). All participants were upper secondary students enrolled in a community tele-high school in the municipality of Temascalapa, State of Mexico, with no distinction regarding sex or academic average. The sampling method used was non-probabilistic convenience sampling. The exclusion criteria considered students who reported receiving psychological treatment, individuals older than the required age range, and those who did not provide informed consent signed by a parent or guardian. Regarding the elimination criteria, participants who were absent from any session of the workshop were excluded, as this could affect the final results.

Additionally, a sample of four psychology experts with knowledge and experience in the application of positive psychology, holding academic degrees ranging from a bachelor's degree with a specialization diploma to master's and doctoral degrees was included. Selected through expert sampling, they carried out the content validation of the workshop.

Evaluation Setting

The intervention was carried out in a community tele-high school located in the municipality of Temascalapa, State of Mexico. The institution provided support by assigning a classroom with a capacity for 50 people to conduct the intervention, as well as offering audiovisual projection equipment.

Evaluation Instruments

Anxiety Inventory (Beck et al., 1988; Beck & Steer, 1993), validated for the Mexican population by Padros et al. (2020), is a self-report instrument composed of 21 items that assess the severity of anxiety symptoms. Each item addresses an anxiety symptom and evaluates the extent to which an individual has been affected during the past week. Response options are based on a 4-point Likert scale ranging from 1 = not at all, 2 = mildly, 3 = moderately, to 4 = severely. The cutoff scores are as follows: 0–7 = minimal or no anxiety, 8–15 = mild anxiety, 16–25 = moderate anxiety, and 26–63 = severe anxiety. Various studies have reported an internal consistency of $\alpha = 0.93$. The items are categorized into two main dimensions: somatic (items 1, 2, 3, 4, 6, 7, 11, 12, 13, 15, 18, 19, 20, 21) and cognitive (items 5, 8, 9, 10, 14, 16, 17).

The CES-D (Radloff, 1977), validated by González-Forteza et al. (2011), is a screening scale used to detect probable cases of depression. It was designed based on studies in both clinical and general populations, and is currently one of the most widely used instruments for evaluating depressive symptoms in clinical and research contexts internationally and nationally. It has the advantage of being structured and brief, in a self-report format. Through 20 items, it assesses various components of depression experienced in the last week (depressed affect, somatic symptoms, psychomotor retardation, and interpersonal difficulties). Response options are based on a 4-point Likert scale ranging from 1 = rarely, 2 = some or little of the time, 3 = occasionally, 4 = most of the time. It also has a cut-off point greater than 16, allowing identification of the presence of depression; scores lower than 16 indicate the absence of depression. The CES-D has consistently shown satisfactory reliability in different sociocultural contexts, populations, and genders, reaching Cronbach's alpha coefficients above 0.80.

PERMA-Profiler (Butler & Kern, 2016), Spanish version for the Mexican population validated by Chaves et al. (2023). This is a self-report instrument with 23 items, including each element of the PERMA well-being model: positive emotions, engagement, positive relationships, meaning, and accomplishment. It also provides a general measure of well-being obtained from the sum of several items (1, 2, 3, 5, 6, 8, 9, 10, 11, 15, 16, 17, 19, 21, 22, and 23), with the highest possible score being 160; that is, the closer the total score is to this number, the higher the level of well-being.

Items use a Likert-type response scale ranging from 0 to 10, where 0 indicates extremely low levels and 10 indicates extremely high levels of well-being. The overall scale has an internal consistency of 0.95.

Judge Validation Questionnaire A questionnaire created by the authors, containing questions about the objectives, activities, and materials of each session of the workshop and whether these allow achieving the general objective. Each question has Likert-type response options ranging from 0 to 10, where 0 indicates complete disagreement and 10 indicates total agreement, followed by an optional open comment section in case experts had observations, suggestions, or recommendations.

Ethical Aspects

Informed consent was obtained, considering that psychologists are professionals guided by honesty, justice, and respect toward others in their professional practice. Articles 94, 98, 101, and

108 of the Ethical Code of Mexican Psychologists, issued by the National Federation of Colleges, Societies, and Associations of Psychologists of Mexico, A.C. (2018), were followed. These emphasize that in research involving people, psychologists must use scientific evidence to support their work, maintain respect toward participants at all times, and provide informed consent, which must be signed by parents or guardians when the participant is a minor. Finally, if any participant wished to withdraw from the study, they were given full freedom to do so.

Likewise, it is important to mention that the ethical standards of the Declaration of Helsinki (1964) regarding research with human beings were followed. (World Medical Association [WMA], 2024)

PROCEDURE

Once the workshop “Positive Psychology and Ikigai: Happier Adolescences” was developed, expert judges carried out the validation process to determine the workshop’s feasibility. The experts reported that the content and instruments to be implemented were appropriate and effective for use with adolescents.

Subsequently, an upper secondary education institution was approached to propose the application of the workshop. Once approval was obtained from the school authorities, the informed consent document was provided to the institution’s administrators, who, given their interest in the research, supported the dissemination of the consent form to parents during a meeting in which the purpose, dates, and schedule of the sessions were explained. After some parents accepted and signed the consent form, a group of 29 students was created to carry out the research-intervention. It is important to note that although students presented their informed consent at the beginning of the workshop, authorization was also requested directly from each voluntary participant.

The intervention program consisted of 4 group sessions, one per week, each lasting 90 minutes. In each session, a single assignment was given so that participants could apply the content learned in their daily contexts. The program was divided as follows:

Session One: Attendance was taken while collecting informed consent from each participant. Subsequently, the initial assessment of anxiety, depression, and general well-being was conducted. Afterward, psychoeducation on depression was provided, followed by positive psychology techniques aimed at reframing the past. Participants then identified their existing strengths, concluding with a list of self-affirmations intended to validate their efforts while enhancing confidence and self-esteem.

Session Two: A review of the previous session’s content was conducted. Participants then explored their knowledge and experience of anxiety. Psychoeducation on anxiety was provided, along with diaphragmatic breathing and mindfulness techniques. Self-gratitude and recognition of personal strengths were also promoted.

Session Three: The session began with a kinesthetic activity to activate participants’ energy, followed by a review of previously covered topics. The Ikigai model was then presented, and guidance was provided to help adolescents

discover their own Ikigai through reflection on four areas accompanied by questions: Passion (What do I love to do and who do I love?), mission (What does the world need?), profession (What are my skills?) and vocation (How could I get paid for something I'm good at, that I love doing, and that benefits others?). Participants then reflected on the habits and values that can help them achieve their Ikigai. The session concluded by promoting gratitude for the present—that is, for what they already have.

Session Four: This session was called the “flourishing session” and began with an activity to energize participants. A general review of previous sessions followed. Guidance was provided to help adolescents discover what other activities allow them to enter a state of flow—that is, activities they enjoy and that contribute to their well-being. A reflection on satisfiers versus maximisers was then conducted, encouraging awareness of why it is essential to engage in satisfying activities. Finally, the content learned was reinforced through storytelling therapy.

At the end of the four sessions, the test battery was administered again, and the data were subsequently analyzed. First, the assumption of normality was evaluated using the Kolmogorov-Smirnov test. All p values were greater than .05, indicating that the distributions met the criterion for normality. Based on this, a paired-samples t test was conducted using the Statistical Package for the Social Sciences (SPSS; Version 20) to compare the pre- and post-intervention scores. A total of 27 participants were included in the analysis. Two students were excluded because they presented absences due to weather-related conditions and, according to the predetermined exclusion criteria, their data were removed from the study.

RESULTS

Descriptive statistics for the evaluated variables are presented first. Subsequently, and after verifying the assumption of normality using the Kolmogorov-Smirnov test, differences between the pre- and post-intervention measurements were analyzed using a paired-samples t test.

Regarding anxiety levels, it was observed that prior to the intervention, 18.5% of the participants presented a minimal anxiety level, a percentage that increased to 33.3% in the post-intervention evaluation. Similarly, the percentage of participants with mild anxiety increased from 22.2% in the initial measurement to 25.9% in the post-test.

In contrast, moderate and severe anxiety levels, which initially concentrated the highest percentages at 29.6% each, showed a decrease after the intervention, dropping to 25.9% and 14.8%, respectively (Table 1).

Table 1
Results of Anxiety Levels in the Pre-test and Post-test

Pretest		Posttest	
Anxiety	f(%)	Anxiety	f(%)
Minimal	5 (18.5)	Minimal	9 (33.3)
Mild	6 (22.2)	Mild	7 (25.9)
Moderate	8 (29.6)	Moderate	7 (25.9)
Severe	8 (29.6)	Severe	4 (14.8)
Total	27(99.9)	Total	27(99.9)

Regarding depression levels, a change is also observed between the pre-test and post-test. In the initial measurement, 18.5% of the participants scored below the cut-off point, indicating no presence of depression; however, 81.4% scored above it, indicating the presence of depression in a large portion of the adolescents. Nevertheless, in the final evaluation, 59.2% of the participants scored below the cut-off point, indicating that a greater number of individuals no longer presented depressive symptomatology, while 40.7% still presented depressive symptoms. These results can be observed in (Table 2).

Table 2
Differences Between pre-test and post-test in Participants' Depression Levels

Pretest		Posttest	
Depression	f(%)	Depression	f(%)
<16 (NO)	5(18.5)	<16 (NO)	16(59.2)
>16 (YES)	22(81.4)	>16 (YES)	11(40.7)
Total	27(99.9)	Total	27(99.9)

Regarding the differences in anxiety, depression, and general well-being levels for each participant, differences can be observed in the post-intervention measurement, as shown in Table 3. Anxiety and depression levels show a decrease, while general well-being shows an increase in the scores of all participants.

Table 3
Differences per Participant Between pre-test and post-test in Anxiety (A), Depression (D), and General Well-Being (GW) Levels

Pretest				Posttest			
P	A	D	GW	A	D	GW	
1	6	25	111	4	15	125	
2	2	17	83	2	14	98	
3	3	22	146	1	16	158	
4	5	10	48	4	7	56	
5	5	21	130	5	15	132	
6	8	16	118	6	6	130	
7	9	16	136	6	9	136	
8	9	23	123	9	10	124	
9	10	24	121	9	3	125	
10	11	56	66	20	54	75	
11	12	19	120	12	14	146	
12	16	40	47	7	30	51	
13	18	14	138	10	13	140	
14	18	28	61	13	13	114	
15	19	27	106	18	9	119	
16	23	39	138	7	30	139	
17	24	42	130	11	25	130	
18	25	20	102	14	12	120	
19	25	12	109	19	8	130	
20	29	34	115	29	25	128	
21	29	30	108	22	18	130	
22	29	24	105	29	20	121	
23	30	52	109	22	38	109	
24	30	24	98	24	22	112	
25	43	31	102	38	23	131	
26	44	41	132	20	27	138	
27	55	24	108	31	13	112	

Before conducting the inferential analysis, the assumption of normality was verified using the Kolmogorov-Smirnov test for

the pretest and posttest scores of anxiety, depression, and overall well-being. In all cases, *p* values were greater than .05, indicating no significant deviations from a normal distribution. This allowed the analysis of pre–post differences to proceed using the paired-samples *t* test (Table 4).

Table 4

Kolmogorov-Smirnov normality test for the study variables.

Variable	K Statistic	<i>p</i> -value	Normality
Pre Beck	0.127	0.726	Normal
Post Beck	0.120	0.785	Normal
Pre CES-D	0.139	0.564	Normal
Post CES-D	0.177	0.266	Normal
Pre PERMA	0.191	0.241	Normal
Post PERMA	0.194	0.228	Normal

To analyse the pre-test–post-test differences, a parametric paired-samples *t* test was applied. The results showed that anxiety levels decreased significantly after the intervention, going from a mean of $M = 19.88$ ($SD = 13.53$) in the pre-test to $M = 14.51$ ($SD = 9.9$) in the post-test, with $t(26) = 3.797$, $p = .05$. Regarding depression levels, a significant reduction was also observed, with a mean of $M = 27.07$ ($SD = 11.65$) in the initial measurement and $M = 18.11$ ($SD = 11.07$) after the intervention, with $t(26) = 8.784$, $p = .05$. Finally, general well-being showed an increase after the intervention, rising from $M = 107.77$ ($SD = 26.58$) in the pre-test to $M = 119.59$ ($SD = 24.73$) in the post-test, a result that was also statistically significant, $t(26) = -5.258$, $p = .05$ (Table 5).

Table 5

*Differences Between pre-test and post-test in Anxiety, Depression, and General Well-Being Using Student's *t*-test*

Variable	Pretest		Posttest		<i>t</i>	Student	<i>Sig.</i>
	n	M	SD	M			
Anxiety	27	19.88	13.53	14.51	9.9	3.797	0.001
Depression	27	27.07	11.65	18.11	11.07	8.784	.000
Perma	27	107.77	26.58	119.59	24.73	-5.258	.000

DISCUSSION

The findings of the present study show that the pilot program titled Positive Psychology and *Ikigai*: Happier Adolescents yielded positive and significant reductions in anxiety and depression, along with increased well-being. These results suggest that programs based on positive psychology and *Ikigai* may serve as viable psychosocial strategies for promoting emotional awareness.

This result is consistent with what has been reported in previous research (Seligman, Steen, Park, & Peterson, 2005), which has demonstrated the effectiveness of techniques such as mindfulness, diaphragmatic breathing, and the recognition of personal strengths in reducing anxiety among adolescents.

Regarding depression, the data also show a considerable improvement. At the beginning, more than 80% of the adolescents presented depressive symptoms, which aligns with

what has been reported by Alzuri et al. (2017), Kieling et al. (2024), and the WHO (2024) concerning the onset of symptomatology for certain disorders such as depression and anxiety during adolescence.

However, it is important to note that after the intervention this percentage decreased to 40.7%. This finding agrees with national research indicating that reframing past experiences, practicing gratitude, and developing a sense of meaning in life have a direct impact on reducing depressive symptoms (Chávez & Morales, 2017).

Likewise, a significant increase was identified in general well-being levels, measured through the PERMA model. This highlights the importance of fostering positive experiences, meaningful relationships, and a sense of purpose during adolescence, a stage characterized by identity exploration and the search for meaning. This was illustrated through participants' final reflections on the workshop: "Thanks to the teacher we can know ourselves more" (Participant 1), "Your sessions help us a lot and I think many of us feel very understood and we identify with each other" (Participant 16), and "Thank you for being a great help to me. You arrived when I was experiencing many emotional lows, thank you" (Participant 20).

It is worth noting that conducting a group based intervention may also have enhanced the results, as it provides a space for emotional support, identification, and connection among participants elements that are fundamental in psychological change processes during adolescence.

However, certain methodological limitations must be acknowledged, such as the reduced sample size, which limits the generalization of the results to other populations. Therefore, it is suggested that future studies incorporate control groups and diversify the structure of the workshop. Finally, although improvements were observed, it is important to recognize that a percentage of adolescents continued to show depressive symptomatology, indicating the need for longer interventions or those combined with individual strategies.

In summary, results are encouraging, paving ways for similar research. Group interventions complement, not replace, therapy, bridging access amid taboos. Greater visibility in communities and education is essential.

CONCLUSIONS

The results of this exploratory and pilot study suggest that the workshop "Positive Psychology and *Ikigai*: Happier Adolescents" constitutes an intervention that contributes to improving the emotional well-being of adolescents by reducing levels of anxiety and depression and significantly increasing overall well-being.

Similarly, it can be determined that the combination of positive psychology with the *Ikigai* model allowed participants to acquire personal tools for emotional regulation, the recognition of their strengths, and the pursuit of a meaningful life purpose.

This study contributes to the field of psychosocial and psychoeducational intervention by demonstrating that brief, structured, and culturally adapted programs can generate

positive changes in the mental health of adolescents in highly vulnerable school contexts.

The active participation of psychology experts in the preliminary evaluation of the workshop and the institutional support of the community telehigh school were key factors in the successful implementation of this research-intervention.

It is suggested that future studies consider the use of experimental designs with a control group, as well as longitudinal assessments that allow the analysis of the sustained impact of the intervention. Likewise, adapting the program to different educational settings would be advisable to strengthen its applicability and effectiveness across diverse populations.

In conclusion, this work highlights that an educational intervention centered on positive psychology and the discovery of Ikigai can promote emotional well-being, increase overall well-being, and serve as a protective factor for adolescents' mental health, thereby fostering a more conscious and meaningful adolescence.

REFERENCES

[1] Aberastury, A., & Knobel, M. (1989). *La adolescencia normal. Un enfoque psicoanalítico*. Paidós Educador.

[2] Alzuri-Falcato, M., Hernández-Muñoz, N., & Calzada-Urquiola, Y. (2017). Depresión en la adolescencia: Consideraciones necesarias para su diagnóstico y tratamiento. *Revista Finlay*, 7(3), 152-154. <http://revfinlay.sld.cu/index.php/finlay/article/view/541>

[3] Arntz, J., Trunce, S., Villarroel, G., Werner, K., & Muñoz, S. (2022). Relación de variables sociodemográficas con niveles de depresión, ansiedad y estrés en estudiantes universitarios. *Revista Chilena de Neuro-Psiquiatría*, 60(2), 156-166. <http://dx.doi.org/10.4067/S0717-92272022000200156>

[4] Asociación Médica Mundial. (2024). Declaración de Helsinki de la AMM: Principios éticos para las investigaciones médicas con participantes humanos. Adoptada en la 18^a Asamblea Médica Mundial, Helsinki, Finlandia, junio 1964. <https://www.wma.net/policies-post/declaracion-de-helsinki>

[5] Chacon, E., De la Cera, D., Fernández, M., & Murillo, R. (2021). Generalidades sobre el trastorno de ansiedad. *Revista Cúpula*, 35(1), 23-36. <https://www.binasss.sa.cr/bibliotecas/bhp/cupula/v35n1/art02>

[6] Chaves, C., Ballesteros-Valdés, R., Madridejos, E., & Charles-Leija, H. (2023). PERMA-profiler for the evaluation of well-being: Adaptation and validation in a sample of university students and employees in the Mexican educational context. *Applied Research in Quality of Life*, 18(1), 1-23. <https://doi.org/10.1007/s11482-022-10132-1>

[7] Correa Aizaga, T. G., Hinojosa Herrera, L. D., Cartuche Soto, N. E., & Sánchez Peralta, S. E. (2024). La psicología positiva aplicada en el estudiante de Educación Básica: Reflexiones desde la motivación. *Revista Social Fronteriza*, 4(2), e42250. [https://doi.org/10.59814/resofro.2024.4\(2\)250](https://doi.org/10.59814/resofro.2024.4(2)250)

[8] Cuesta-Mosquera, E. L., Picón Rodríguez, J. P., & Pineida Parra, P. M. (2022). Tendencias actuales sobre la depresión, factores de riesgo y abuso de sustancias. *Journal of American Health*, 5(1). <https://jah-journal.com/index.php/jah/article/view/114>

[9] De Salud, S. (2022). 467. Más de 50 % de trastornos mentales en la edad adulta iniciaron en la niñez y la adolescencia. gob.mx. <https://www.gob.mx/salud/prensa/467-mas-de-50-de-trastornos-mentales-en-la-edad-adulta-inicieron-en-la-ninez-y-la-adolescencia?idiom=es>

[10] Federación Nacional de Colegios, Sociedades y Asociaciones de Psicólogos de México (FENAPSIME). (2018). Código de ética de las y los psicólogos mexicanos. <https://www.fenapsime.org.mx>

[11] Gallegos, G. (2018). *Vacio adolescente* (Tesis para obtener el título de Licenciatura). Universidad Autónoma del Estado de México, Biblioteca Central. <https://ru.dgb.unam.mx/bitstream/20.500.14330/TES01000778289/3/0778289.pdf>

[12] García, H. G., & Miralles, F. M. (2016). *Ikigai: Los secretos de Japón para una vida larga y feliz* (Vol. 1). Urano.

[13] García, H., & Miralles, F. (2019). *Ikigai: Los secretos de Japón para una vida larga y feliz* (2.^a ed.). Urano.

[14] Gómez-Restrepo, C., Tamayo-Martínez, N., Bohórquez, A., Rondón, M., Medina-Rico, M., & Rengifo, H. (2016). Depression and Anxiety Disorders and Associated Factors in the Adolescent Colombian Population, 2015 National Mental Health Survey. *Revista Colombiana de Psiquiatría*, 45(Suppl 1), 58-67. <https://doi.org/10.1016/j.rcp.2016.04.009>

[15] González-Forteza, C., Solís Torres, C., Jiménez Tapia, A., Hernández Fernández, I., González-González, A., Juárez García, F., Medina-Mora, M. E., & Fernández-Várela Mejía, H. (2011). Confiabilidad y validez de la escala de depresión CES-D en un censo de estudiantes de nivel medio superior y superior, en la Ciudad de México. *Salud Mental*, 34(1), 53-59. Recuperado el 27 de abril de 2025, de http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0185-33252011000100007&lng=es&tlang=es

[16] Guerra, J., Gutiérrez, M., Zavala, L., Singre, J., Goosdenovich, D., & Romero, E. (2017). Relación entre ansiedad y ejercicio físico. *Revista Cubana de Investigaciones Biomédicas*, 36(2), 169-177. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0864-03002017000200021

[17] Huamani, S., Saavedra-López, M., Autor, & Hernández, R. (2021). Resumen. <https://doi.org/10.5281/zenodo.5752456>

[18] Kieling, C., Buchweitz, C., Caye, A., Silvani, J., Ameis, S. H., Brunoni, A. R., Cost, K. T., Courtney, D. B., Georgiades, K., Merikangas, K. R., Henderson, J. L., Polanczyk, G. V., Rohde, L. A., Salum, G. A., & Szatmari, P. (2024). Worldwide prevalence and disability from mental disorders across childhood and adolescence: Evidence from the Global Burden of Disease Study. *JAMA Psychiatry*, 81(4), 347-356. <https://doi.org/10.1001/jamapsychiatry.2023.5051>

[19] Molina, D. (2021, junio). Ikigai proyectos de vida para trabajar con los estudiantes. *Revista Paras Aula*, 38, 8. <https://www.usfq.edu.ec/sites/default/files/2021-07/pea-038-002.pdf?itok=ZH8cT4tE0f>

[20] Muñoz, K., Arévalo, K., Tipan, M., & Morocho, M. (2021). Prevalencia de depresión y factores asociados en adolescentes. *Revista Ecuatoriana de Pediatría*, 22(1), 1-8. <https://doi.org/10.52011/0008>

[21] Olmos Carbonell, A. M. (2021). *¿Mi Ikigai?, aplicando técnicas de videomapping* (Tesis de maestría, Universitat Politècnica de València, Escola Politècnica Superior de Gandia).

[22] Organización Mundial de la Salud. (2024, 10 de octubre). La salud mental de los adolescentes. <https://www.who.int/es/news-room/fact-sheets/detail/adolescent-mental-health#>

[23] Padrós Blázquez, F., Montoya Pérez, K. S., Bravo Calderón, M. A., & Martínez Medina, M. P. (2020). Propiedades psicométricas del Inventario de Ansiedad de Beck (BAI, Beck Anxiety Inventory) en población general de México. *Ansiedad y Estrés*, 26(2-3), 181-187. <https://doi.org/10.1016/j.anyes.2020.08.002>

[24] Páez, S. D. (2019). *Educación física para la felicidad. De la gestión emocional al Ikigai..* Recuperado de: <http://hdl.handle.net/20.500.12209/16350>

[25] Riffó Allende, G. (2021). Psicología y crecimiento positivo. El afrontamiento maduro de la dificultad: La respuesta al COVID-19. Evaluación de una intervención basada en la psicología positiva, para la disminución de conductas antisociales en adolescentes. *Revista de Psicología*, Universidad Pedro de Valdivia, Chile. <https://doi.org/10.17060/ijodaep.2021.n1.v2.2119>

[26] Romero-Acosta, K. (2014). La comorbilidad de síntomas ansiosos y depresivos en la niñez. Nuevas directrices de investigación. *Revista de Psicología GEPU*, 5(2), 15–31.

[27] Rother, M. (2013). *Adolescentes desamparados*. H. Lerner, Co.

[28] Secretaría de Finanzas. (2022). Comunica ISSEMYM principales conductas de riesgo en la adolescencia. <https://finanzas.edomex.gob.mx/node/394>

[29] Seligman, M. (2003). La auténtica felicidad: Un nuevo enfoque para el bienestar. (M. Diago & A. Debrutto, Trans.). Ediciones B. (Trabajo original publicado en 2002)

[30] Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being*. Free Press.

[31] Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60(5), 410–421. <https://psycnet.apa.org/doi/10.1037/0003-066X.60.5.410>

[32] Serna-Arbeláez, D., Terán-Cortés, C., Vanegas-Villegas, A., Medina-Pérez, O., Blandón-Cuesta, O., & Cardona-Duque, D. (2020). Depresión y funcionamiento familiar en adolescentes de un municipio de Quindío, Colombia. *Revista Habanera de Ciencias Médicas*. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1729-519X2020000600016&lng=es&nrm=iso&tlang=es

[33] Tirado, K., & Diaz, J. (2022). Depresión e ideación suicida en adolescentes: Una revisión narrativa. *PsiqueMag: Revista científica digital de Psicología*, 11(2). <http://revistas.ucv.edu.pe/index.php/psiquemag/>

[34] Quimbita Quimbita, L. P. (2023). *Ikigai en el desempeño académico de los estudiantes universitarios* [Trabajo de titulación, Universidad Técnica de Ambato]. Repositorio Institucional de la Universidad Técnica de Ambato.

[35] Yáñez Salas, F. X. (2023). *El método Ikigai como estrategia de contención emocional en los estudiantes de educación general básica superior* [Trabajo de investigación, Universidad Tecnológica Indoamérica]. Repositorio Institucional de la Universidad Tecnológica Indoamérica.