# Improving Life Satisfaction, Self-Concept, and Happiness of Former Gang Members Using Games and Psychological Skills Training

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## Abstract

The purpose of this study was to determine the effects of games and mental skills training on Mexican former gang members and drug users' self-concept, life satisfaction, perceived control, and happiness. Male ($n = 9$) and female ($n = 10$) former gang members aged 15-29 ($M = 19.95$) participated in ten sessions containing games to improve communication, trust, and problem-solving; and the development of mental skills such as imagery, self-talk, goal setting, activation control, and self-confidence. Within an uncontrolled pre/post design, questionnaires were completed in the first and tenth sessions. Results indicated significant improvements in happiness, life satisfaction, and self-concept (physical appearance, close friendship, behavioral conduct, scholastic competence, athletic competence, social acceptance, and global awareness). Mental skills training and games appear to be an effective combination for improving the quality of life of former gang members.

## Introduction

Gang members on probation are more likely to have a history of illegal drug use and abuse and are more prone to reoffend than non-gang members on probation, and are unlikely to have finished high school or been employed at the time of their sentencing.[1] This type of information has led many policymakers and practitioners serving youth to focus on problem reduction or prevention. Approaching youth with the goal of avoiding or reducing problem behaviors such as drug use, unemployment, school dropout, and gang membership usually involves a deficit view of

young people.[2] A deficit view sees people as having weaknesses that need to be avoided or diminished, and does not focus on developing strengths, skills, and behaviors that enable individuals to develop their capabilities for positive contributions to self and society. Taylor et al.[3] provided evidence that gang members possess the potential for positive development and have assets that may be used to promote positive behavior and development.

Poverty status has been found to have a significant effect on gang membership.[4] Individuals living in poverty experience continuously adverse circumstances that lead to a perceived lack of control resulting in helplessness, hopelessness, and diminished will power.[5] Individuals who feel they do not have the ability to control events or their behaviors tend to believe they are not responsible for what happens in their lives. Developing self-regulation skills may encourage individuals living in poverty and high crime areas to become active participants in their own lives. In a study of youth living in poverty in the United States, Buckner, Mezzacappa, and Beardslee[6] found that self-regulatory skills and self-esteem were related to resilience even after controlling for differences in chronic strains and the experiences of negative life events. Self-regulation can be beneficial in terms of dealing with stress in a proactive manner and coping with stressors that have already occurred.[7]

In terms of interventions that may promote self-regulation, physically active games can help develop the skills of problem-solving and decision making under pressure,[8] and have been shown to be superior to social recreation

programs in terms of enhancing attitudes and actions regarding cooperation and trust.[9] Games allow for the concurrent development of physical and intellectual capacities, which in turn enhance self-awareness, self-esteem, and enjoyment.[10] Adolescents' self-reported physical activity has also been associated with perceived life satisfaction[11] and health-related quality of life.[12] Adding psychological skills to an intervention may also be helpful because they have been linked with psychological wellbeing.[13] Developing skills such as goal-setting and self-confidence may help individuals establish a sense of mastery. Mastery is the ability to manage and control life circumstances that significantly affect the individual.[14] Mastery arises from successful coping with stressors and is related to having a sense of control and self-direction, but can be impaired by exposure to difficult conditions.[15]

The purpose of this study was to determine if a program combining physically active games and psychological skills training could enhance the life satisfaction, happiness, perceptions of control, and self-concept of ex-gang members. The intervention was based on the program of physically active games and psychological skills that Hanrahan[16] found significantly enhanced the life satisfaction and self-worth of Mexican teenage orphans.

## Method

### Participants

Twenty individuals (9 males and 10 females) aged 15-29 (M = 19.95; SD = 4.93) from an organization called Raza Nueva in Monterrey, Mexico, voluntarily took part in the study. Raza Nueva is a project that seeks, by means of personal contact, to help young gang members leave their situations of violence, drug addiction, and delinquency. The mission of the organization is "that the young gang members find a new life in Christ and become motivated, not only in study and work, but also to become developers of peace in their neighborhoods, with their own gangs, and with the gangs with whom they have had conflict"[17] Many of the participants began taking and/or selling drugs at a young age, and some were the victims and/or perpetrators of physical violence (e.g., stabbings). Some of the participants were previously incarcerated. Participants were involved with Raza Nueva for a mean of 1.17 years (range = 1 month to 3.5 years). Four of the participants worked part-time at Raza Nueva, but had formerly been gang members themselves. The other fifteen participants were all ex-gang members. Because Raze Nueva has no formal membership roster, it is not possible to indicate what percentage of gang members with access to Raza Nueva volunteered to take

part in the program. Information about the program was distributed by Raza Nueva; interested people showed up at the pre-established time. The study's investigators had no previous contact with any of the participants.

### Instruments

Self-Perception Profile for Adolescents

Based on Harter's Self Perception Profile for Children, [18] Harter's Self-Perception Profile for Adolescents (SPPA) [19] was designed to measure multiple dimensions of self-concept in the adolescent stage of development. The SPPA measures a variety of self-concept dimensions (e.g., physical appearance, social acceptance) as well as global self-worth. Researchers[20][21][22] have tested the psychometrics of the English version of the SPPA, resulting in support of slightly different subscales. Pastor, Balaguer, Atienza, and García-Merita[23] tested a Spanish version of the SPPA with students aged 15 to 18 years of age and found support for six clearly differentiated self-concept dimensions (i.e., scholastic competence, physical appearance, athletic competence, behavioral conduct, close friendship, and social acceptance) as well as a one-dimensional subscale of global self-worth. Cronbach alphas ranged from .62 to .90. The items pertaining to Job Competence from the original SPPA were omitted in the Pastor et al. version of the scale because they were believed to be irrelevant to the majority of the participants. Because job competence was also irrelevant to the majority of participants in this study, the Spanish translation from the Pastor et al. study was used. Items were scored on the subscales obtained in the previous Spanish study, thus ignoring the items designed to measure romantic attraction that are included in the English version of the scale. The mean age of the sample was less than 20 years old, making the choice of scale age-appropriate for the sample.

Satisfaction With Life Scale

The Satisfaction With Life Scale (SWLS) was developed by Diener, Emmons, Larsen, and Griffin[24] to measure life satisfaction without the potentially confounding factors of apathy or enthusiasm. The original English version has been found to have good test-retest reliability and internal consistency.[25] Atienza, Pons, Balaguer, and García-Merita[26] translated the SWLS into Spanish, the only change being the use of a 5-point rather than the original 7-point Likert scale. A confirmatory factor analysis indicated that the model fit was acceptable. The Spanish version of the SWLS was also found to have good internal consistency and construct validity.[26]

Mirowsky-Ross 2X2 Index

The Mirowsky-Ross 2X2 Index measures sense of control over one's own life.[27] The measure is not biased by self-defense or self-blame or by the tendency to agree with statements regardless of content. The 2X2 balanced measure ensures that defense bias and agreement bias are eliminated. Mirowsky and Ross[27] demonstrated that the index has good content, criterion, and construct validity. The index contains two subscales (one about good outcomes and one about bad outcomes) with the items claiming control balancing the items that deny control.[28]

Happiness Measure

Studies about happiness have employed diverse methods to evaluate this construct, often using five, seven, or ten-point Likert scales. Fordyce[29] developed a measure of happiness with two items: a) General level of happiness, and b) Percentage of time one feels happy, unhappy, or neutral. Overall the Happiness Measures have good stability, convergent validity, construct validity, and discriminative validity, but the first item has been reported to have stronger convergent validity with other indices of subjective wellbeing in 26 of 30 reported correlations.[29] For our study we only used the first item that asks respondents to indicate on a figure of a staircase, with the top step (10) indicating a life that is completely happy and the bottom step (0) indicating an unhappy life, the step on which they are currently situated. Diener and Diener[30] reported that Fordyce's Happiness Measure (a one-time self-report measure) did not lead to excessively high estimates of happiness compared with other methods, and that it provided similar results to daily experience sampling.

**Procedure**

Ethical clearance was obtained from the first author's university (Clearance # 2014001134). All participants received an information sheet (in Spanish) about the program that made it clear they were free to withdraw at any time without penalty. Informed consent was obtained from all participants before the start of the program.

The program consisted of ten sessions of approximately 2 hours each, held on weekdays for 2 weeks. The Raza Nueva staff members were invited to come 30 minutes early to each session to provide an opportunity for them to ask questions or make suggestions and to review the purpose of the previous session and outline the objectives of the current session. This extra time was allocated to make sure that

what the facilitator was doing in the program was relevant to the participants, but also to increase the chances that the staff members would be comfortable running the program on their own in the future. The authors were the facilitators of the sessions. Both are registered psychologists and had previous experience working with disadvantaged populations. Between one and four volunteers from a local university attended each session to help with small group discussions, provide one-on-one support, and expose them to the program for possible future use with Raza Nueva or other organizations. In the month prior to the program with Raza Nueva, the same volunteers were exposed to the program when it was run at a group home.

Within an uncontrolled pre/post research design, the participants completed the questionnaires in the first and final sessions, using codes instead of names to ensure anonymity. The overarching theme for the program was "control the controllable." Individual sessions contained worksheets, discussions and activities related to mental skills traditionally used in sport psychology such as optimal activation, goal-setting, concentration and attention, imagery, self-talk and self-confidence. Regular use of small groups encouraged participants to apply material to their own situations and to learn from each other. Small group discussions included topics such as aspects of their lives they have or have not controlled, factors they should consider trying to control, progression or obstacles towards their short-term goals and future plans, positive experiences, examples of how they have been able to refocus their attention, the possible purposes of imagery scripts, the purposes of affirmations, what they can do to make others in the group feel better about themselves, and changes they have made during the program. Each participant received a folder in which to keep written exercises and handouts. Stickers were used as rewards for punctual attendance and the completion of homework activities. All sessions also contained active games, the majority of which were designed to develop communication, trust, teamwork, and problem-solving skills.[31] Through the course of the program, games were introduced in a sequence that moved from icebreakers to deinhibitizers/energizers to trust and empathy games, and finally to initiative activities. In the first session, participants each described an area of their life that they would like to improve as well as an activity or sport they enjoyed. Many of these descriptors were then used by the facilitator and volunteers in future sessions to make the content of the sessions relevant to the participants. Each session ended with a thought for the day, and sometimes the assignment of a small amount of homework; Hanrahan[32][33] highlighted much of the information used in

the content of the sessions. Although the organization through which the participants were contacted was Catholic, the program coordinator made no mention of religion during the intervention.

## Results

### Attendance

Participation in the program was entirely voluntary. There were a total of ten sessions, and participants attended between four and ten of them. The mean attendance was 8.47 sessions (SD = 1.6; Mdn = 9). All participants completed the questionnaires in the first session and all but one completed the questionnaires in the final session.

### Paired Sample Statistics

The pre- and post-test means for happiness, life satisfaction, physical appearance, close friendship, behavioral conduct, scholastic competence, athletic competence, social acceptance, global self-worth, and sense of control over good and bad outcomes are presented in Table 1. The paired sample T-test results are also in Table 1. There were significant improvements in all of the tested variables except for sense of control. The change in perceived control of positive outcomes approached significance. The changes in means between time 1 and time 2 were all in the expected direction.

**Table 1. Pre- and Post-test Means, Standard Deviations, and Paired Sample Tests**

| Scale | n | Pre Mean (SD) | Post Mean (SD) | t | Sig. |
|---|---|---|---|---|---|
| Happiness | 18 | 7.22 (1.44) | 8.39 (1.38) | 3.70 | .002 |
| Life Satisfaction | 17 | 3.71 (0.62) | 4.32 (0.68) | 34.03 | .001 |
| Physical Appearance | 18 | 2.81 (0.75) | 3.14 (0.63) | 2.92 | .010 |
| Close Friendship | 16 | 2.94 (0.96) | 3.58 (0.55) | 3.22 | .006 |
| Behavioral Conduct | 17 | 2.35 (0.68) | 3.00 (0.60) | 4.18 | .001 |
| Scholastic Competence | 15 | 2.42 (0.69) | 3.00 (0.60) | 3.26 | .006 |
| Athletic Competence | 14 | 2.60 (0.61) | 3.00 (0.74) | 2.73 | .017 |
| Social Acceptance | 18 | 3.11 (0.52) | 3.43 (0.47) | 3.31 | .004 |
| Global Self-Worth | 11 | 2.71 (0.46) | 3.24 (0.46) | 3.76 | .004 |
| Control Good Events | 18 | 1.72 (1.58) | 2.11 (1.62) | 1.87 | .079 |
| Control Bad Events | 17 | 0.41 (1.18) | 0.50 (1.49) | 0.29 | .779 |

## Discussion

Happiness, life satisfaction, and self-concept significantly improved from pre-program to post-program. Not only did global self-concept significantly increase, but so did physical appearance, close friendship, behavioral conduct, scholastic competence, athletic competence, and social acceptance self-concepts. The issue of self-concept was not specifically targeted in the program, although there was a session about techniques that can be used to increase self-confidence. In a similar study with orphans, the only self-concept scales that showed significant improvement were global self-concept and physical appearance self-concept.[16] It is possible that the orphanage, which had sporting facilities on site and required school attendance, already provided opportunities for the development of scholastic and athletic competence that were not readily available to the former gang members in the present study. The physically active games allowed for experiences of success for participants of all fitness and ability levels, a characteristic that is possibly the cause of the increase in athletic competence self-concept. Similarly, the completion of the worksheets and brief homework assignments related to mental skills may have been related to perceptions of scholastic competence. In terms of the increases in close friendship and social acceptance self-concepts, the former gang members possibly had few social opportunities outside of the program. Although the participants may have been participating in other activities through Raza Nueva, these activities would not have taken place on a daily basis. Previous research indicates that conventional social opportunities are limited in impoverished urban areas, which lead youth to deal drugs as much for socialization as for income.[34] Although well beyond the scope of the present study, it may be that providing alternative social opportunities in gang areas, such as those available in the program used in this study, may help to decrease crime. In this study, close friendship and social acceptance self-concepts significantly increased alongside behavioral conduct self-concept. The behavioral conduct self-concept scale included items such as, 'Not doing things I shouldn't,' and 'Doing the right thing.' There is no way of knowing from this study if the participants' actual behavior changed; it may have been that after participating in the intervention program they wanted the researchers to perceive them as engaging in desirable behaviors and avoiding undesirable behaviors.

The significant increase in happiness is particularly noteworthy given that the participants' mean pre-test happiness score of 7.32 was already higher than the

normative mean of 6.92 reported by Fordyce[29] with a sample of 3050 American community college students. Similarly, the mean pre-test life satisfaction score of 3.78 was well above the midpoint of the scale, and was comparable to that found in Spanish students from Valencia.[26] Unfortunately no mean scores for Mexican socially disadvantaged groups could be found with which to make comparisons, but nevertheless, the former gang members could not be described as unhappy or dissatisfied with life. Even so, happiness scores were significantly higher at the end of the program than they were at the start.

In a study of happiness in everyday life, Csikszentmihalyi and Hunter[35] found that teenagers from working class and impoverished backgrounds were happier than upper-middle class and upper-class teenagers, suggesting that material wealth may be an obstacle to happiness. Although the mean pre-test happiness scores of the former gang members were above the normative mean, the participants still represent a disadvantaged group. Just because they did not score below the norm for happiness before the intervention does not mean that they could not benefit from even higher levels of happiness. After all, it may be easier to increase the wellbeing of individuals in this population than it is to change socioeconomic factors.

It is rather ironic that the only dependent variable that was mentioned directly within the program (i.e., control) is the only one that did not significantly change. The theme for the program was "control the controllable," and participants had more than one discussion about which factors in their lives were controllable or uncontrollable. In the second session of the program there was 100% agreement that it was much easier to think of things they could not control than things they could control. It is possible that the findings may have been different if the participants had explicitly revisited the idea of control near the end of the program. Throughout the program, however, participants were introduced to techniques related to control (e.g., thought stopping, attention and concentration, goal setting, relaxation and activation, self-confidence development). In a similar intervention program with Mexican orphans, the participants were able to list many more controllable factors at the end of the program than they could at the beginning of the program,[16] but that study did not include a psychometric measure of control.

There is no way of knowing whether the mental skills training or the games were the primary cause of the changes in the dependent variable, or if both components are required for change. Future research could implement only the games with one group and only the mental skills training with another, to see if one section of the program on its own is as effective as the full program. It is doubtful, however, that attendance at a program within this population would be as high without the opportunity to play and run around. Although the games used in the program were designed to develop trust, communication, and problem solving skills, they were also intended to be fun. Given the limited opportunities that many of the participants had previously had to play, it may be that it was the playfulness of the program that resulted in such significant changes in the dependent variables. Although play can have long-term developmental meaning or value, it also has personal, experiential value that may be of equal, if not greater, importance.[36]

Future research should also address the limitations of the present study. The two biggest limitations are the lack of a control group, and the absence of follow-up data. Without a control group, it is possible that some unknown extraneous factors lead to the changes described above. Another limitation is that the program was run through a faith-based organization, so it may be that the intervention may not be generalizable to former gang members who are not involved in such faith-based organizations. Nevertheless, Mexico has the second largest Catholic population in the world, with roughly 85% of citizens being Catholic.[37] Future research, however, could test the intervention through organizations that are not faith based.

Even with these limitations, the study provides insight into the potential effectiveness of mental skills training and games in enhancing the life satisfaction, happiness, and self-concept of former gang members in Mexico. These results indicate the relevance of sport psychology to avenues outside of traditional sport. Although the results cannot demonstrate unequivocally the effectiveness of the intervention, they do demonstrate the feasibility of implementing such an intervention in this context.

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