

# The Impact of Theory-Based Trainings on the Level of Creativity of Family Day Care Providers

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## ABSTRACT

The purpose of this quantitative study was to evaluate how two interventions, based upon two substantially different theories of creativity, impact 125 Latina female childcare providers and their assistants' level of creativity. The age range of the participants was 27 – 71 years old, and the experience of the participants varied from 1 to 32 years as a child caregiver. This secondary data analysis study was based on a post-test only, true experimental design. This study contributes to understanding of how to reverse the decline of creativity in Latina childcare providers with high cultural sensitivity, and fidelity.

## PROBLEM

Creativity predicts success.  
Creativity is in decline in America.  
Creativity is low in Latino children.  
Creativity is low in Latina providers.  
Creativity in children can be improved by increasing creativity in providers.  
Csikszentmihalyi and Carson offered two different approaches to enhancing creativity.  
No previous research on the relative effectiveness of these or other theories with this group.

## PURPOSE

The purpose of this quantitative experimental study was to test two theories of creativity with Latina childcare providers using culturally sensitive operationalization of the theories.

## RELEVANT LITERATURE

**Csikszentmihalyi's Theory of Creativity (2008):** Creativity is an enjoyable, meaningful, and cheerful process below the level of conscious awareness where the creator is not aware of time and surroundings; often referred to as **Flow**.

**Carson's Theory of Creativity (2010):** Creativity can be enhanced based on seven brain sets (brainsets) that can be consciously activated through particular activities; often referred to as **Seven Steps**.

**The Torrance Theory of Creativity (1995)** is based on mastering the characteristics of creativity: fluency, originality, abstractness of titles, elaboration, and resistance to premature closure.

This study was based on adult learning theory and Latina female child care provider development (Gomez, Rodriguez, & Agosto, 2008) and explored other research on conceptualizations of creativity (Friedman and Mandelbaum, 2011; Cropley & Cropley, 2008; Eckhoff & Urbach, 2008).

## RESEARCH QUESTIONS

**RQ1:** Are there significant ( $p \leq .05$ ) interaction effects between type of training and aspect of creativity as measured by the Torrance tests of creative thinking (Torrance, 2008) among Latina child care providers?

**RQ2:** Is there a significant difference between how participants rate the cultural sensitivity of the training in each group?

**RQ3:** Is there a significant difference between how participants rate their satisfaction with the training in each group?

**RQ4:** To what extent is each type of training delivered in accordance with the essential elements of each theory as rated by four members of a panel of professional social workers trained in both theories of creativity?

## PROCEDURES

The agency **randomly assigned** all caregivers to one of three groups. The control group completed health and safety training with Department of Health and Mental Hygiene.

The primary researcher:

- Developed curricula and trained four presenters
- Trained four social workers to observe and evaluate sessions to assess implementation fidelity
- Administered the **Torrance tests of creative thinking** (Torrance, 2008) to all three groups and cultural sensitivity and training satisfaction surveys to the Csikszentmihalyi and Carson groups.
- Conducted **secondary data analysis** based on a **true experimental post-test-only** design with a control group.

## DATA ANALYSIS

**RQ1** 3 x 5 Repeated Measures ANOVA to test the **interaction** effects of type of training by aspect of creativity (each participant was measured on all five aspects of creativity).

**RQs 2 and 3:** Independent sample *t*-tests.

**RQ4:** Experts used checklists to assess training fidelity for each group.

## FINDINGS

Control group scored significantly lower than norms on all five measures of creativity (See Figure).

**RQ1:** Interaction between type of training and aspect of creativity was significant; therefore, tested **simple main effects** instead of main effects (see Figure 1).

**RQ2, 3, & 4:**

- High ratings on sensitivity, satisfaction, and fidelity. Carson was rated significantly higher on sensitivity.
- No difference in satisfaction ratings.
- Sensitivity and satisfaction were significantly correlated.

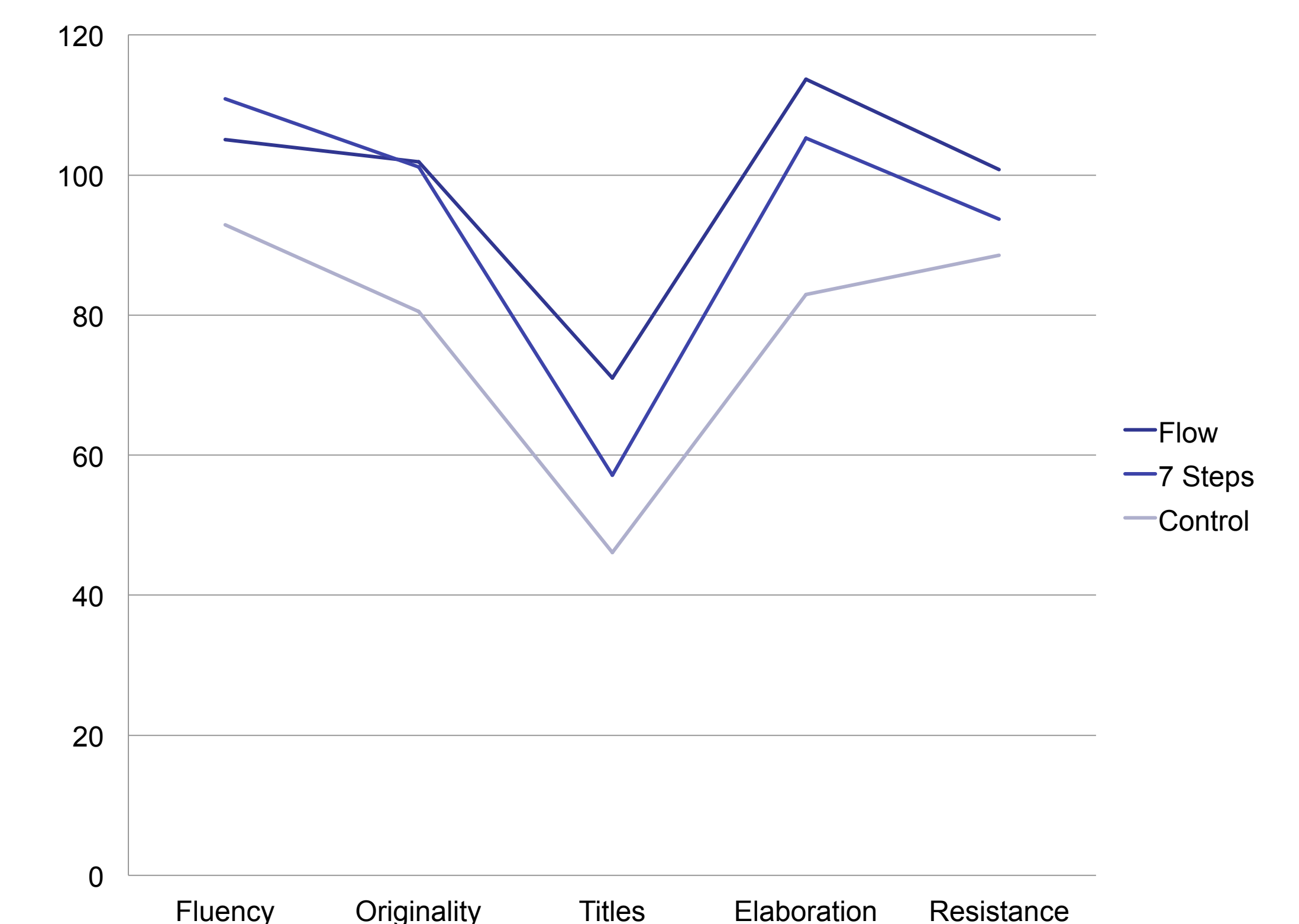


Figure: Creativity Score for Aspect by Type of Training

## LIMITATIONS

Sphericity was violated for RQ1 therefore, used the Greenhouse-Geisser adjustment. Titles category was positively skewed, with a very large percentage earning the lowest score possible. A 3x4 Repeated Measures ANOVA without titles generated the same conclusions. Sensitivity and satisfaction were negatively skewed. Non-parametric tests generated the same conclusions. Low external validity.

## CONCLUSIONS

Flow and seven steps theories were both effective in increasing creativity among Latina child care providers using culturally sensitive curricula. Seven steps was not better than the control group on one aspect of creativity but was somewhat higher on sensitivity.

## SOCIAL CHANGE IMPLICATIONS

This study contributed to understanding how to improve creativity in Latina child care providers using either a flexible flow approach, or a more structured seven steps process. Both methods were rated high on sensitivity, satisfaction, and fidelity and can be used to increase the creative potential of society by indirectly promoting the development of a new generation of creative thinkers.