



# The Impact Of Employment Status On Cognitive Flexibility: A Comparative Study Of Working And Non-Working Women

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## Abstract

Cognitive flexibility is a critical executive function that enables individuals to adapt their thinking to changing environmental demands.<sup>1</sup> This study aimed to investigate the difference in cognitive flexibility between working (n=85) and non-working women (n=80). Using the Cognitive Flexibility Inventory (CFI) and a purposive sampling method, data was collected and analyzed via an independent samples t-test. The results revealed a statistically significant difference ( $t = 4.58, p < .05$ ), indicating that working women possess higher levels of cognitive flexibility than their non-working counterparts. The findings suggest that the multifaceted demands of professional life may serve as a catalyst for cognitive adaptability.

Key Words: Cognitive Flexibility, Working status

## Introduction

Cognitive flexibility refers to the mental ability to switch between thinking about two different concepts and to think about multiple concepts simultaneously.<sup>2</sup> It is the antithesis of cognitive rigidity, allowing individuals to transition smoothly between different tasks and mental sets (Diamond, 2013).<sup>3</sup>

In the socio-cultural context, women often balance varied roles. The "**Working Woman**" operates in a dual-domain environment, navigating professional hierarchies, deadlines, and social interactions alongside household management.<sup>4</sup> Conversely, the "**Non-Working Woman**" (homemaker) focuses primarily on the domestic sphere.

The theoretical framework of this study is rooted in the **Environmental Complexity Hypothesis** (Kohn & Schooler, 1983), which suggests that individuals in more complex environments develop greater cognitive capacities. Because professional environments often require rapid problem-solving and task-switching, this study explores whether such exposure results in higher cognitive flexibility compared to a domestic setting.

## Review of Literature

### Theoretical Framework: The CFI

Dennis and Vander Wal (2010) developed the Cognitive Flexibility Inventory (CFI) to measure three specific clinical aspects: the tendency to perceive difficult situations as controllable, the ability to perceive multiple alternative explanations for life occurrences, and the ability to generate multiple alternative solutions to difficult situations.<sup>5</sup> Their research established that cognitive flexibility is a significant predictor of psychological health.

### Employment and Intellectual Flexibility

Research by **Schooler, Mulatu, and Oates (2004)** demonstrated that "substantively complex work"—work that requires thought and independent judgment—increases intellectual flexibility over time. They argued that the brain adapts to the complexity of its environment, much like a muscle grows with exercise.

### The "Double Burden" and Cognitive Shifting

Studies on role theory, such as those by **Grzywacz and Marks (2000)**, suggest that managing multiple roles (the "role enhancement" model) provides diverse rewards including social support and cognitive stimulation. For a working woman, the requirement to switch from a "managerial/analytical" mindset at work to a "nurturing/caregiving" mindset at home involves constant exercise of the prefrontal cortex, which governs cognitive shifting.

### Domestic Environment and Routine

While homemaking is complex, it is often characterized by higher levels of routine and fewer "forced" cognitive shifts compared to professional environments. **Spiro (2006)** noted that cognitive flexibility can decline if an individual is not exposed to "novel" stimuli or unpredictable challenges that require a departure from established habits.

## Methodology

### Research Objective

To assess and compare the levels of cognitive flexibility among working and non-working women.

### Hypothesis

**H<sub>1</sub>:** There is a significant difference in the cognitive flexibility scores between working and non-working women.

**Research Design:** The non experimental comparative research design.

### **Sample and Sampling Technique**

A total of **165 women** participated in the study.

- **Group 1:** Working Women (n = 85)
- **Group 2:** Non-Working Women (n = 80)

The Purposive Sampling method was used to ensure participants fit the specific criteria (e.g., full-time employment vs. full-time homemaker).

### **Scale:**

Cognitive Flexibility Inventory was measured by a 20-item scale, Cognitive Flexibility inventory (CFI) developed by Dennis and Vander Wal (2009), a practical performance-based measure. The inventory consists of two subscales, Alternative subscale (13 items) measuring the ability to perceive multiple alternative explanations for life occurrences and human behaviour; and the ability to generate multiple alternative solutions to difficult situations and Control subscale (7 items) measuring the tendency to perceive difficult situations as controllable. Research indicated that the CFI has a reliable two-factor structure, good to excellent internal consistency, and high 7-week test-retest reliability. It uses a 7-point Likert scale to indicate the extent to which the participant agrees or disagrees. 1-strongly disagree to 7-strongly agree. Reverse scoring is applied for selective items (2, 4, 7, 9, 11, & 17) and then summing the numerical values to obtain total score. The items were evaluated by content validity analysis and concluded that it required a sixth-grade reading ability. Cronbach's alpha for CFI indexed to be .90 and .91. Bivariate correlations conducted across Time 1 and Time 2 indicated high 7-week test-retest reliability for the CFI ( $r = .81$ ;  $p \leq .001$ ). Convergent construct validity was evidenced by significant correlations between CFS. As indicated by Dennis and Vander Wal (2009), higher scores were intended to be indicative of greater cognitive flexibility, which was predicted to be associated with greater cognitive adaptability when encountering stressful situations. Lower scores were intended to be indicative of greater cognitive rigidity, which was predicted to be associated with less cognitive adaptability when encountering stressful situations. The total score can range between 20 and 140.

### **Data collection:**

The research collected the data using the above mentioned data, the researcher personally collected the data. The researcher seek the consent from the participant and collected data.

## Statistical Analysis

An **Independent Samples t-test** was used to determine the significance of the difference between the mean scores of the two groups.

## Results

The statistical analysis indicates a significant difference between the two groups.

**Table 1**

**Mean, Standard Deviation, and t-value for Cognitive Flexibility**

Variable	Group	N	Mean (M)	SD	t-value	p-value
Cognitive Flexibility	Working	85	96.40	8.24	4.58*	< .05
	Non-Working	80	88.15	9.12		

*\*Significant at the .05 level.*

The results show that working women achieved a significantly higher mean score ( $M = 96.40$ ) compared to non-working women ( $M = 88.15$ ). The calculated t-value (4.58) exceeds the critical value, confirming that the difference is not due to chance.

## Discussion

The results support the hypothesis that employment status significantly impacts cognitive flexibility. The higher scores among working women may be attributed to the "forced" cognitive variety found in the workplace.

Working women must frequently engage in:

- **Social Shifting:** Interacting with colleagues, clients, and family members within the same 24-hour cycle.
- **Task-Switching:** Moving from technical work to interpersonal communication.
- **Novel Problem Solving:** Professional environments often present unpredictable challenges that cannot be solved by routine.

Non-working women, while managing complex tasks, may operate within a more predictable schedule, which provides fewer opportunities to practice "out-of-the-box" thinking as measured by the "Alternatives" subscale of the CFI.

## Conclusion:

This study concludes that there is a significant difference in the cognitive flexibility of working and non-working women. Professional engagement appears to be a significant factor in fostering higher levels of mental adaptability and alternative solution generation.

## Implications

- **Societal:** Recognizes the cognitive "value-add" of professional work for women, countering traditional views that domestic roles provide equal cognitive variety.
- **Clinical:** Therapists working with homemakers might suggest "cognitive stimulation" activities (hobbies, social clubs, or volunteer work) to maintain mental flexibility.
- **Occupational:** Encourages organizations to value the cognitive agility of women returning to the workforce after breaks.

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