

Research Article

Identity Structure and Adolescent Mental Health: The Mediating Roles of Identity Centralization and Redundancy

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Keywords

• Identity Structure; Adolescents; Evaluative Contexts; Internalizing Problems; Structural Equation Modeling; Depression

Abstract

This study examined how identity processes and evaluative contexts are associated with internalizing problems in adolescents. A total of 742 South Korean adolescents (52% female; M age = 15.6) completed measures of identity domain centralization, identity redundancy, academic evaluative pressure, and depressive symptoms. Structural equation modeling was conducted to test the hypothesized relationships among these variables.

Results indicated that academic evaluative pressure was positively associated with identity centralization, which in turn was negatively associated with identity redundancy. Identity redundancy was significantly associated with lower levels of depressive symptoms. Mediation analysis revealed that identity redundancy partially mediated the relationship between evaluative pressure and depressive symptoms. Multi-group analysis indicated partial gender differences, with stronger effects observed among female adolescents.

These findings highlight the importance of identity-related structural processes in adolescent mental health. The results suggest that diversified identity structures may function as a protective factor against internalizing problems in evaluative contexts.

INTRODUCTION

Adolescence is a critical developmental period during which individuals construct a coherent sense of identity, which plays a central role in psychological adjustment [1,2]. A substantial body of research has demonstrated that identity processes, including exploration and commitment, are associated with well-being and mental health outcomes [3,4]. However, most identity research has focused primarily on process-oriented aspects, with less attention given to the structural characteristics of identity [5].

At the same time, contemporary adolescents are increasingly exposed to intensified evaluative environments characterized by academic competition and social comparison. These contexts may influence not only identity processes but also the way identity is structurally organized [6]. Specifically, adolescents may centralize their self-definition around a limited number of domains, potentially reducing the diversity of identity-related resources.

Drawing on research from identity development and self-complexity, the present study focuses on two

structural aspects of identity: domain centralization and identity redundancy [7,8]. Identity centralization refers to the extent to which self-worth is concentrated in a limited number of domains, whereas identity redundancy reflects the availability of multiple meaningful identity anchors. A more diversified identity structure may buffer individuals against stress by preventing domain-specific failure from generalizing across the entire self [7].

The present study aims to examine how evaluative contexts are associated with identity structure and, in turn, internalizing problems in adolescents. Prior research has shown that low self-esteem and identity-related vulnerabilities are linked to depression [9], suggesting that identity structure may play a critical role in mental health outcomes. Specifically, we test a structural model in which academic evaluative pressure predicts identity centralization, which is associated with reduced identity redundancy and increased depressive symptoms.

METHOD

Participants and Procedure

Participants were 742 South Korean adolescents (52%

female) aged between 14 and 17 years ($M = 15.6$), recruited from middle and high schools in urban areas. Data were collected using self-report questionnaires administered in classroom settings. All procedures were approved by an institutional review board.

Measures

Identity centralization was assessed using items measuring the extent to which self-worth depended on a limited number of domains. Identity redundancy was measured by assessing the diversity of meaningful identity domains, based on theoretical frameworks of self-complexity [7]. Academic evaluative pressure was assessed using items reflecting perceived academic competition and performance-based evaluation [6]. Depressive symptoms were measured using a validated self-report scale consistent with established measures of depression [10,11]. All scales demonstrated acceptable internal consistency (Cronbach's $\alpha > .70$).

Data Analysis

Structural equation modeling (SEM) was conducted using AMOS 26.0 to test the hypothesized model. Model fit was evaluated using standard indices, including the comparative fit index (CFI), Tucker–Lewis index (TLI), and the root mean square error of approximation (RMSEA) [12,13]. Multi-group analyses were conducted to examine gender differences.

RESULTS

The proposed model demonstrated acceptable fit to the data (CFI = .95, TLI = .94, RMSEA = .045), meeting recommended criteria for structural equation modeling [12]. Academic evaluative pressure was positively associated with identity centralization ($\beta = .42$, $p < .001$), which was negatively associated with identity redundancy ($\beta = -.37$, $p < .001$). Identity redundancy was significantly associated with lower levels of depressive symptoms ($\beta = -.34$, $p < .001$).

Mediation analysis indicated that identity redundancy partially mediated the relationship between evaluative pressure and depressive symptoms. Multi-group analysis revealed partial gender invariance, with stronger centralization effects observed among female adolescents.

DISCUSSION

The present study examined the structural aspects of identity in relation to internalizing problems among adolescents. The findings suggest that evaluative contexts are associated with identity centralization, which reduces identity redundancy and increases vulnerability to

depressive symptoms. These findings are consistent with theoretical perspectives emphasizing the role of identity in psychological adjustment [1-5].

These results extend previous identity research by highlighting the importance of structural characteristics of identity, beyond traditional process-based approaches [4]. While prior studies have focused on exploration and commitment, the present findings indicate that the distribution of identity domains may also play a critical role in psychological adjustment.

From a developmental perspective, identity redundancy may function as a protective factor by providing multiple sources of self-definition. This interpretation is consistent with self-complexity theory, which suggests that diversified self-structures buffer against stress and depression [7]. When adolescents possess diverse identity anchors, they may be better able to cope with domain-specific stress.

The findings also have practical implications. Educational and intervention programs may benefit from promoting diversified identity development, rather than emphasizing performance in a single domain. Such approaches may reduce vulnerability to internalizing problems in highly evaluative environments.

Several limitations should be noted. First, the cross-sectional design limits causal interpretation. Second, all measures were based on self-report. Future research should employ longitudinal designs to examine changes in identity structure over time.

This study contributes to understanding adolescent psychological adjustment by integrating identity-related processes within a structural framework [14-18].

Informed Consent

Informed consent was obtained from all participants, and parental consent procedures were followed in accordance with relevant ethical guidelines.

Data Availability

The datasets generated and/or analyzed during the current study are not publicly available but are available from the corresponding author on reasonable request.

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