



From Participation to Identity: A Mechanism Based Model of Youth Development through Self Determination Theory in Scouting Contexts

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Abstrak

This article develops a mechanism-based conceptual model explaining how participation in scouting activities contributes to youth identity formation through motivational processes. Drawing on Self-Determination Theory, Positive Youth Development, and identity formation literature, the study argues that participation in scouting does not directly produce developmental outcomes, but operates through sequential psychological mechanisms. Specifically, structured scouting participation is theorized to foster psychological need satisfaction, including autonomy, competence, and relatedness. These fulfilled needs subsequently promote autonomous motivation, which facilitates internalization and supports the integration of scouting experiences, values, and roles into a coherent sense of self. The proposed model positions psychological need satisfaction and autonomous motivation as central mediating mechanisms, while autonomy supportive environments function as contextual moderators that strengthen developmental pathways. By integrating fragmented literatures on youth development, motivation, and identity, this article advances a process-oriented explanation of how non-formal educational contexts contribute to long-term developmental outcomes. The framework offers theoretical contributions by extending Self-Determination Theory into scouting contexts and practical implications for designing youth programs that support autonomy, competence, relatedness, reflection, and identity development. Future research should empirically test the proposed model using longitudinal and structural equation modeling approaches across diverse cultural settings.

Keywords

autonomous motivation; identity formation; positive youth development; psychological need satisfaction; scouting; self-determination theory; youth development

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1. Introduction

Youth development has become an increasingly critical concern in contemporary societies, particularly in response to rising levels of disengagement, declining civic participation, and growing identity uncertainty among adolescents. These challenges are not only social but also developmental, as adolescence represents a crucial period for the formation of identity, motivation, and long-term life orientation (Meeus, 2011; Crocetti *et al.*, 2008; Ryan & Deci, 2020). In this context, structured non-formal education systems such as scouting have gained renewed attention as developmental environments capable of supporting holistic youth growth beyond formal schooling (Damon, 2004; Larson, 2000; Eccles *et al.*, 2003).

Within the broader literature, Positive Youth Development (PYD) has emerged as a dominant paradigm for understanding how structured activities contribute to desirable developmental outcomes. PYD adopts a strengths-based perspective, emphasizing the cultivation of developmental assets and competencies rather than the prevention of risk behaviors (Benson *et al.*, 2006; Lerner *et al.*, 2005). Central to this framework is the Five Cs model, consisting of competence, confidence, connection, character, and caring, which collectively represent key indicators of thriving youth (Bowers *et al.*, 2010). Empirical evidence consistently demonstrates that participation in organized youth activities is associated with improved psychosocial functioning, academic engagement, and prosocial behavior (Catalano *et al.*, 2004; Durlak *et al.*, 2010; Ciocanel *et al.*, 2017).

Despite its contributions, PYD research has been widely criticized for its strong emphasis on outcomes while providing limited explanation of the underlying processes that produce these outcomes. Existing studies often document positive associations between participation and developmental indicators without specifying the psychological mechanisms that explain how such transformations occur (Larson, 2000; Roth & Brooks-Gunn, 2003; Lerner *et al.*, 2015). As a result, the field lacks a coherent process-based framework that can explain how structured participation leads to deeper psychological changes, particularly identity formation.

This limitation becomes especially important during adolescence, a developmental stage characterized by intensive identity exploration and commitment processes. Identity formation is increasingly conceptualized as a dynamic and iterative process shaped by interactions between individuals and their social environments (Meeus, 2011; Crocetti *et al.*, 2008). However, while identity research highlights the importance of contextual experiences, it rarely explains how these experiences are internalized into stable aspects of the self. This gap suggests the need for a theoretical lens that can connect external participation with internal psychological transformation.

Self-Determination Theory (SDT) offers a powerful framework for addressing this gap. SDT posits that human development is driven by the satisfaction of three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 2000; Ryan & Deci, 2020). When these needs are satisfied, individuals are more likely to develop autonomous motivation, engage deeply in activities, and internalize external values into their self-concept (Niemic & Ryan, 2009; Howard *et al.*, 2021). Extensive empirical evidence confirms that need-supportive environments promote engagement, well-being, and adaptive functioning across educational and developmental contexts (Ntoumanis *et al.*, 2021; Reeve & Cheon, 2021).

Recent advances in SDT research further suggest that motivation should be understood as a central mechanism linking contextual experiences to long-term developmental outcomes. Meta-analytic findings indicate that need satisfaction predicts not only short-term engagement but also persistence, behavioral regulation, and identity-relevant processes over time (Howard *et al.*, 2021; Ntoumanis *et al.*, 2021). However, despite this potential, SDT

has rarely been systematically integrated with PYD frameworks or identity development research, resulting in a fragmented understanding of youth development processes.

At the same time, organized youth activities such as scouting provide a particularly relevant context for examining these mechanisms. Scouting combines experiential learning, social interaction, leadership development, and value-based education in a structured yet flexible environment. These characteristics align closely with both PYD principles and SDT assumptions, making scouting a theoretically rich but underexplored setting for studying developmental processes (Hattie *et al.*, 1997; Bowen & Neill, 2013). Empirical studies indicate that participation in scouting is associated with long-term benefits, including improved mental health, resilience, and civic engagement (Dibben *et al.*, 2017; Szałachowski *et al.*, 2024). However, these studies remain largely descriptive and do not articulate the mechanisms through which these outcomes emerge.

The lack of integration between PYD, SDT, and identity formation represents a significant theoretical gap. PYD explains what developmental outcomes occur, SDT explains how motivation operates, and identity research explains how individuals form a sense of self, yet these perspectives are rarely combined into a unified framework. Consequently, there is limited understanding of how participation in structured youth activities is translated into internalized identity outcomes through motivational processes (Ryan & Deci, 2020; Howard *et al.*, 2021; Lerner *et al.*, 2015).

In response to this gap, this article proposes a mechanism-based conceptual framework that integrates Self-Determination Theory with youth development and identity formation literature. The model posits that participation in scouting activities fosters psychological need satisfaction, which in turn promotes autonomous motivation and facilitates identity formation. By explicitly modeling these processes, the study shifts the focus from outcome-based descriptions to causal explanations of developmental change.

This study makes several key contributions. First, it advances a process-oriented perspective on youth development by identifying psychological mechanisms that link participation to identity formation. Second, it integrates three previously fragmented theoretical domains, namely PYD, SDT, and identity theory, into a coherent framework. Third, it extends the application of SDT to non-formal education contexts, particularly scouting, thereby broadening its theoretical scope and practical relevance. Finally, the study provides a foundation for future empirical research aimed at testing mechanism-based models of youth development.

The remainder of this article is structured as follows. The next section reviews the relevant literature and theoretical foundations. This is followed by identification of the theoretical gap, development of the conceptual framework, formulation of propositions, and discussion of theoretical and practical implications.

2. Theoretical Background

This section develops a theoretically integrated foundation for understanding youth development mechanisms by synthesizing three major streams of literature: Positive Youth Development (PYD), Self-Determination Theory (SDT), and research on organized youth activities. Rather than treating these perspectives as separate domains, this section positions them as complementary frameworks that collectively explain how structured participation can lead to deeper psychological transformation, particularly identity formation. By integrating outcome-oriented, motivational, and developmental perspectives, this review establishes the conceptual basis for a mechanism-based model of youth development (Lerner *et al.*, 2015; Ryan & Deci, 2020; Howard *et al.*, 2021).

2.1 Positive Youth Development as a Foundational Framework

Positive Youth Development represents a major paradigm shift from deficit-based models toward a strengths-based understanding of youth as resources to be developed. Instead of focusing on risk prevention, PYD emphasizes the cultivation of developmental assets, which include both internal capacities such as skills and values, and external supports such as relationships and opportunities (Benson *et al.*, 2006; Damon, 2004). These assets are conceptualized as interacting dynamically within developmental systems, shaping trajectories of growth over time (Lerner *et al.*, 2015).

One of the most influential conceptualizations within PYD is the Five Cs model, which includes competence, confidence, connection, character, and caring (Bowers *et al.*, 2010; Lerner *et al.*, 2005). These dimensions capture the multidimensional nature of youth development outcomes and have been empirically linked to positive indicators such as academic achievement, civic engagement, and reduced risk behaviors (Catalano *et al.*, 2004; Ciocanel *et al.*, 2017). As such, PYD provides a comprehensive framework for identifying desirable developmental outcomes.

However, a key limitation of PYD lies in its outcome-oriented orientation. While it effectively describes what constitutes positive development, it provides limited insight into how these outcomes are generated through underlying psychological processes (Larson, 2000; Roth & Brooks-Gunn, 2003). Recent relational-developmental perspectives attempt to address this limitation by emphasizing bidirectional interactions between individuals and their environments, yet they still lack precise specification of the motivational mechanisms involved (Lerner *et al.*, 2015; Bureau *et al.*, 2022). This gap highlights the need to integrate PYD with theories that can explain the processes through which developmental assets are activated and internalized.

2.2 Self-Determination Theory in Youth Development

Self-Determination Theory provides a robust theoretical framework for understanding the motivational mechanisms underlying human development. At its core, SDT posits that individuals possess three basic psychological needs, namely autonomy, competence, and relatedness, which are essential for optimal functioning and psychological growth (Deci & Ryan, 2000; Ryan & Deci, 2020). The satisfaction of these needs promotes intrinsic motivation and facilitates the internalization of external behaviors into self-endorsed actions.

A central contribution of SDT lies in its explanation of the internalization process. This process describes how externally guided activities can become integrated into the self, progressing along a continuum from controlled to autonomous regulation (Ryan & Connell, 1989; Deci *et al.*, 1991). In youth development contexts, this mechanism is particularly relevant, as participation often begins under external structure but can evolve into intrinsically motivated engagement when psychological needs are satisfied.

Extensive empirical evidence supports the role of need satisfaction in predicting engagement, persistence, and well-being. Meta-analytic findings indicate that need-supportive environments significantly enhance motivation and behavioral outcomes across educational and developmental settings (Howard *et al.*, 2021; Ntoumanis *et al.*, 2021). Furthermore, recent studies highlight that autonomy-supportive climates are especially effective in fostering long-term engagement and reducing disengagement among youth (Reeve & Cheon, 2021; Aelterman *et al.*, 2019). Emerging evidence also suggests that SDT mechanisms are robust across diverse populations, including at-risk youth, reinforcing their generalizability (Berkovich & Gueta, 2022; Çelik, 2024).

Despite its strengths, SDT has been predominantly applied in formal education and health contexts. Its integration into broader youth development frameworks remains limited, particularly in explaining how motivational processes contribute to long-term developmental

constructs such as identity formation (Guay, 2022; Martela & Ryan, 2016). This limitation suggests that SDT's explanatory potential has not yet been fully realized within the domain of non-formal youth development.

2.3 Organized Youth Activities and Developmental Processes

Organized youth activities, including extracurricular programs and non-formal education initiatives, have been widely recognized as important contexts for developmental growth. These activities provide structured environments characterized by adult guidance, peer interaction, and goal-oriented engagement, which collectively support skill development and socialization (Eccles & Barber, 1999; Feldman & Matjasko, 2005).

Empirical research consistently demonstrates that participation in such activities is associated with a range of positive outcomes, including improved academic performance, social competence, and psychological well-being (Fredricks & Eccles, 2006; Ramey & Rose-Krasnor, 2012). However, these outcomes are not merely the result of participation itself but depend on the quality of experiences within these activities. Opportunities for meaningful involvement, skill-building, and supportive relationships play a crucial role in shaping developmental outcomes (Hansen *et al.*, 2003; Larson *et al.*, 2006).

Recent scholarship emphasizes that the developmental impact of organized activities should be understood as a psychologically mediated process rather than a direct effect of participation. High-quality programs that incorporate autonomy support, reflection, and meaningful engagement are more likely to foster internalization and identity-relevant learning outcomes (Bureau *et al.*, 2022; Cronin *et al.*, 2022). This perspective shifts the focus from participation as exposure toward participation as an experiential process that activates developmental mechanisms.

Despite these advances, existing research remains fragmented in its explanation of how participation leads to deeper psychological transformation. While engagement, skill development, and social interaction are often identified as mediating factors, they are rarely integrated within a coherent theoretical framework that specifies causal pathways linking participation to long-term developmental outcomes (Fredricks & Simpkins, 2013; Ciocanel *et al.*, 2017). This fragmentation limits the ability to develop comprehensive models of youth development.

2.4 Motivation, Engagement, and Identity Formation

Identity formation is widely recognized as a central developmental task during adolescence. Contemporary research conceptualizes identity as a dynamic process involving exploration and commitment across various domains, shaped by continuous interaction between individuals and their social environments (Meeus, 2011; Crocetti *et al.*, 2008). This process requires not only exposure to diverse experiences but also the internalization of these experiences into a coherent sense of self.

Motivation plays a critical role in this process by influencing the depth and quality of engagement. SDT-based research suggests that autonomous motivation fosters deeper involvement, persistence, and reflection, all of which are essential for identity development (Ryan & Deci, 2020; Jang *et al.*, 2016). Individuals who engage in activities with a sense of volition are more likely to explore and commit to identity-relevant roles and values.

Recent integrative perspectives further suggest that identity formation can be understood as an outcome of sustained motivational processes. Autonomous motivation facilitates the internalization of experiences, transforming externally structured activities into personally meaningful components of the self (Laporte *et al.*, 2021; Howard *et al.*, 2021). This positions motivation as a central mechanism linking contextual experiences to identity outcomes.

Social interaction also plays a crucial role in shaping identity. Supportive relationships provide feedback, validation, and opportunities for social comparison, which contribute to both exploration and commitment processes (Soenens & Vansteenkiste, 2005; Hardy *et al.*, 2015). Within the SDT framework, relatedness satisfaction enhances both motivation and identity integration, highlighting the importance of social contexts in developmental processes.

Despite these insights, research on motivation and identity has largely developed in parallel, with limited theoretical integration. This separation results in an incomplete understanding of how motivational processes contribute to identity formation, particularly within structured youth activities.

2.5 Scouting as a Developmental Context

Scouting represents a distinctive form of organized youth activity that integrates experiential learning, social interaction, and value-based education. Rooted in principles of learning by doing, scouting provides opportunities for youth to engage in real-world challenges, develop practical skills, and reflect on their experiences (Hattie *et al.*, 1997; Bowen & Neill, 2013).

Empirical evidence suggests that participation in scouting is associated with a range of long-term benefits. Studies indicate that individuals with scouting experience demonstrate better mental health outcomes, higher levels of resilience, and stronger civic engagement in later life (Dibben *et al.*, 2017; Szałachowski *et al.*, 2024). These findings highlight the potential of scouting as a powerful developmental environment.

Moreover, scouting aligns closely with the core assumptions of both PYD and SDT. It provides structured opportunities for competence development, encourages autonomy through self-directed learning, and fosters relatedness through strong peer and community relationships. These characteristics make scouting an ideal context for examining the interplay between participation, motivation, and identity.

However, despite its global reach and developmental potential, scouting remains under-theorized in academic literature. Existing studies tend to focus on outcomes without explicating the mechanisms through which these outcomes are produced. This lack of theoretical articulation limits the ability to generalize findings and to design evidence-based youth programs.

Synthesis and Theoretical Direction

Taken together, the literature reveals a clear pattern of fragmentation. PYD provides a framework for understanding developmental outcomes, SDT explains motivational processes, and identity research describes the formation of the self, yet these perspectives are rarely integrated into a unified explanation of youth development. Organized activity research highlights the importance of context but lacks a coherent theoretical model linking participation to internal transformation.

This fragmentation underscores the need for a mechanism-based framework that connects participation, motivation, and identity within a single conceptual model. Such a framework should explain how structured participation fosters psychological need satisfaction, how need satisfaction promotes autonomous motivation, and how sustained motivation leads to identity formation. Addressing this gap provides the foundation for advancing both theoretical understanding and practical application in youth development research.

To clarify the theoretical integration underlying this study, Table 1 summarizes the key contributions, limitations, and roles of each theoretical perspective in the proposed framework.

Table 1. Theoretical Integration of Youth Development Frameworks

Theory	Core Focus	Key Contribution	Limitation	Role in This Study
Positive Youth Development	Developmental outcomes and assets	Identifies dimensions of positive youth outcomes such as competence, connection, and character	Emphasizes outcomes without explaining underlying processes	Provides outcome framework and contextual foundation
Self Determination Theory	Motivation and psychological needs	Explains how autonomy, competence, and relatedness drive motivation and internalization	Limited application in non formal youth contexts	Serves as core mechanism explaining developmental processes
Identity Formation Theory	Development of self concept	Explains exploration and commitment processes in identity development	Weak linkage with motivational mechanisms	Defines the final developmental outcome
Organized Youth Activity Research	Participation and engagement	Demonstrates positive impact of structured activities on youth development	Lacks coherent mechanism based explanation	Provides empirical and contextual grounding

Source: Developed by the author

As shown in Table 1, each theoretical perspective contributes a distinct yet complementary component to understanding youth development. The integration of these perspectives enables the construction of a mechanism-based framework that connects participation, motivation, and identity within a unified explanatory model.

3. Identifying the Theoretical Gap

This section critically evaluates the existing literature to identify unresolved theoretical issues in understanding youth development mechanisms. While substantial progress has been made in examining developmental outcomes and motivational processes, the literature remains fragmented in explaining how participation in structured youth activities translates into deeper psychological transformations, particularly identity formation. Specifically, three major gaps emerge concerning theoretical integration, mechanism specification, and identity linkage.

First, there is a fundamental lack of integration between Positive Youth Development and Self-Determination Theory. PYD scholarship has primarily focused on identifying developmental assets and outcomes, emphasizing what youth gain from participation rather than how these gains are produced (Benson *et al.*, 2006; Bowers *et al.*, 2010; Catalano *et al.*, 2004). In contrast, SDT provides a detailed explanation of motivational processes through psychological need satisfaction and internalization, yet it has been predominantly applied in formal education and health contexts (Deci & Ryan, 2000; Ryan & Deci, 2020; Ntoumanis *et al.*, 2021). As a result, these two influential traditions have evolved in parallel with limited cross-fertilization, leaving a conceptual gap in understanding how developmental contexts activate motivational mechanisms that lead to long-term developmental outcomes (Guay, 2022; Reeve & Cheon, 2021). Without integration, PYD remains descriptive and SDT remains contextually constrained.

Second, the literature lacks mechanism-based explanations of how participation in organized youth activities produces developmental change. Empirical studies consistently report

positive associations between participation and outcomes such as psychosocial well-being, academic engagement, and civic involvement (Eccles *et al.*, 2003; Fredricks & Eccles, 2006; Durlak *et al.*, 2010). However, these studies often adopt outcome-oriented designs that do not specify the underlying causal pathways through which participation exerts its effects (Larson, 2000; Hansen *et al.*, 2003). Even when intermediate constructs such as engagement or skill development are discussed, they are rarely embedded within a coherent theoretical structure that explains how these processes lead to deeper psychological transformation (Fredricks & Simpkins, 2013; Ciocanel *et al.*, 2017). Recent calls in the literature emphasize the need to move beyond correlational findings toward mechanism-based theorizing that identifies mediating processes and dynamic interactions (Bureau *et al.*, 2022; Howard *et al.*, 2021). This shift remains insufficiently addressed in current youth development research.

Third, there is a significant gap in integrating identity formation within existing frameworks of youth development and motivation. Identity formation is widely recognized as a central developmental task during adolescence, involving processes of exploration and commitment (Meeus, 2011; Crocetti *et al.*, 2008). At the same time, SDT research demonstrates that autonomous motivation facilitates the internalization of values and behaviors, which are foundational to identity development (Ryan & Connell, 1989; Ryan & Deci, 2020). Despite these conceptual overlaps, identity research and motivation research have largely developed in isolation, resulting in limited theoretical integration. Consequently, there is insufficient understanding of how motivational processes translate experiential participation into identity-relevant outcomes (Jang *et al.*, 2016; Laporte *et al.*, 2021). This disconnect prevents a comprehensive explanation of how youth programs contribute to long-term developmental trajectories.

Fourth, the role of social context as a simultaneous driver of motivation and identity remains under-theorized. PYD highlights the importance of supportive relationships and structured opportunities, while SDT emphasizes relatedness as a basic psychological need (Lerner *et al.*, 2005; Niemiec & Ryan, 2009). However, existing studies rarely examine how social environments jointly influence motivational processes and identity formation within a unified framework. This limitation is particularly relevant in group-based contexts such as scouting, where peer interaction, belonging, and shared experiences play a central role in development (Soenens & Vansteenkiste, 2005; Hardy *et al.*, 2015). Without integrating these social dynamics, current models fail to capture the full complexity of developmental processes.

Fifth, although scouting and similar youth organizations have been empirically linked to positive long-term outcomes, they remain under-theorized as developmental systems. Existing studies demonstrate associations with mental health, resilience, and civic engagement (Dibben *et al.*, 2017; Szałachowski *et al.*, 2024), yet they largely adopt descriptive approaches that do not articulate the mechanisms underlying these outcomes. This lack of theoretical articulation limits the ability to generalize findings and to design evidence-based interventions grounded in clear causal logic (Bowen & Neill, 2013; Hattie *et al.*, 1997).

Taken together, these gaps reveal a critical need for a process-oriented and integrative theoretical framework. Specifically, there is a need for a model that connects structured participation, psychological need satisfaction, autonomous motivation, and identity formation within a single explanatory system. Such a model should specify how contextual experiences activate motivational mechanisms, how these mechanisms drive engagement and internalization, and how sustained processes lead to identity development over time.

In response to these limitations, this study proposes a mechanism-based conceptual framework that integrates PYD, Self-Determination Theory, and identity formation. By positioning psychological need satisfaction and autonomous motivation as central mediating processes, the proposed model provides a coherent explanation of how participation in

scouting activities is translated into identity outcomes. This approach not only addresses the fragmentation in existing literature but also advances a more comprehensive understanding of youth development as a dynamic and psychologically mediated process.

4. Conceptual Approach and Analytical Strategy

Theory-building approach used to construct the conceptual model by integrating Self-Determination Theory, Positive Youth Development, and identity formation into a unified explanatory framework. The study adopts a theory synthesis and mechanism-based conceptualization to move beyond fragmented explanations toward a coherent account of how participation in youth activities translates into developmental outcomes through identifiable psychological processes (Bureau *et al.*, 2022; Reeve & Cheon, 2021; Guay, 2022).

In line with contemporary developments in theory-driven research, this approach emphasizes explanatory depth and conceptual integration rather than empirical generalization, aiming to advance a mechanism-based understanding of youth development processes.

4.1 Conceptual Development Approach

The article employs a conceptual development approach grounded in theory elaboration and integration. Rather than generating new empirical data, the study advances theoretical understanding by systematically combining established theories to explain a previously under-theorized phenomenon. This approach is particularly appropriate for addressing complex developmental processes that span multiple domains, including participation, motivation, and identity (Lerner *et al.*, 2015; Ryan & Deci, 2020).

Conceptual development in this context is not merely descriptive but analytical, as it seeks to identify latent relationships and causal structures embedded within existing theories. Recent scholarship highlights that theory-building through conceptual integration is essential for advancing fields characterized by fragmented knowledge structures (Bureau *et al.*, 2022; Jaakkola, 2020). By synthesizing theoretical insights, this study contributes to the development of a more precise and mechanism-oriented explanation of youth development.

4.2 Theory Synthesis Methodology

The study adopts a theory synthesis methodology to integrate insights from PYD, SDT, and identity theory. Theory synthesis involves systematically comparing, contrasting, and combining theoretical constructs to produce a more comprehensive explanatory framework (Guay, 2022; Martela *et al.*, 2021). This method is particularly useful when existing theories provide partial explanations of a phenomenon but lack integration.

The synthesis process follows a structured analytical logic. First, core constructs from each theoretical domain are identified and clearly defined. Second, conceptual overlaps and complementarities are examined, particularly between SDT internalization processes and identity formation dynamics. Third, these constructs are integrated into a sequential and mechanism-based process model that links participation to identity through motivational pathways (Ryan & Connell, 1989; Howard *et al.*, 2021).

Importantly, this synthesis is guided by a mechanism-centered perspective, which prioritizes causal explanation over descriptive aggregation. This ensures that the resulting framework does not merely combine theories but meaningfully integrates them into a coherent explanatory system.

4.3 Mechanism Identification Strategy

A central feature of this study is the identification of causal mechanisms that explain how participation leads to developmental outcomes. Drawing on Self-Determination Theory, the primary mechanism is conceptualized as psychological need satisfaction, which mediates the relationship between environmental inputs and individual outcomes (Deci & Ryan, 2000; Ntoumanis *et al.*, 2021).

Participation in structured youth activities is theorized to provide opportunities for autonomy, competence, and relatedness, which in turn foster autonomous motivation. This process reflects a mechanism-based pathway in which contextual conditions activate psychological processes that lead to internalization and identity formation.

This approach aligns with recent calls for mechanism-based theorizing in psychology and education, which emphasize the importance of identifying mediating processes and causal pathways rather than relying on correlational relationships (Howard *et al.*, 2021; Bureau *et al.*, 2022). By focusing on mechanisms, the study enhances explanatory precision and contributes to the development of more robust theoretical models.

Furthermore, the model incorporates internalization as a key mechanism linking motivation to identity. Internalization represents the process through which externally guided behaviors are transformed into self-endorsed values and commitments, ultimately becoming part of the individual's identity (Ryan & Deci, 2020; Sheldon *et al.*, 2004). This perspective provides a critical bridge between motivational processes and long-term developmental outcomes.

4.4 Multi-Level Analytical Perspective

The conceptual framework adopts a multi-level analytical perspective to capture the complexity of youth development processes. At the individual level, the model focuses on psychological need satisfaction, autonomous motivation, and identity formation. At the group level, peer interaction and social dynamics are conceptualized as sources of relatedness and social validation. At the contextual level, program structures, leadership styles, and organizational environments are treated as antecedents that shape motivational processes (Eccles *et al.*, 2003; Soenens & Vansteenkiste, 2005).

This multi-level perspective reflects contemporary relational-developmental systems thinking, which emphasizes that developmental outcomes emerge from dynamic interactions between individuals and their environments (Lerner *et al.*, 2005; Larson *et al.*, 2006). It also aligns with SDT's emphasis on the role of social context in supporting or undermining psychological need satisfaction.

In particular, autonomy-supportive leadership and structured activity design are identified as critical contextual factors that facilitate need satisfaction and subsequent motivation (Reeve & Cheon, 2021; Aelterman *et al.*, 2019). This highlights the importance of considering both individual and contextual determinants in explaining developmental processes.

4.5 Literature Integration Logic

The integration of literature in this study follows a mechanism-centered logic. Rather than organizing theories based on disciplinary boundaries, the framework is structured around the sequential processes linking participation, motivation, and identity.

PYD provides the contextual foundation by identifying the types of environments and activities that support development. SDT offers the core mechanism by explaining how these environments influence motivation through psychological need satisfaction. Identity theory completes the framework by explaining how sustained motivation leads to internalization and identity formation (Ryan & Deci, 2020; Martela & Ryan, 2016).

This integrative logic enables the construction of a coherent conceptual model that addresses the theoretical gaps identified in the previous section. By explicitly linking participation to identity through clearly defined mechanisms, the framework advances beyond fragmented explanations and contributes to the development of a unified theory of youth development in non-formal contexts (Bureau *et al.*, 2022; Guay, 2022).

In sum, the conceptual approach adopted in this article combines theory synthesis, mechanism identification, and multi-level analysis to build a comprehensive framework explaining how scouting participation fosters identity development. This approach provides the foundation for the subsequent conceptual development and proposition formulation.

5. Conceptual Development

This section develops the core conceptual framework explaining how participation in scouting activities leads to identity formation through motivational mechanisms grounded in Self-Determination Theory. Building on the theoretical integration presented in the previous sections, the model specifies key constructs, causal pathways, and dynamic processes that connect contextual participation to long-term developmental outcomes.

The framework advances a mechanism-based explanation in which psychological need satisfaction and autonomous motivation function as central mediating processes linking participation to identity formation (Ryan and Deci, 2020; Howard *et al.*, 2021; Ntoumanis *et al.*, 2021). By focusing on underlying processes rather than surface-level associations, the model provides a more precise and explanatory account of youth development.

5.1 Core Constructs

The conceptual model is built upon four primary constructs that represent sequential stages in the developmental process.

First, participation in scouting activities is defined as active engagement in structured, experiential, and socially embedded programs characteristic of scouting environments. These activities involve collaboration, leadership opportunities, skill development, and value-based learning experiences (Eccles *et al.*, 2003; Hansen *et al.*, 2003; Dibben *et al.*, 2017). Participation is conceptualized not as mere exposure, but as meaningful involvement in developmental contexts.

Second, psychological need satisfaction refers to the fulfillment of autonomy, competence, and relatedness as defined by Self-Determination Theory. Autonomy reflects the experience of volition and self-direction, competence reflects the perception of effectiveness, and relatedness reflects the sense of connection with others (Deci and Ryan, 2000; Niemiec and Ryan, 2009). These needs represent fundamental psychological conditions required for optimal functioning.

Third, autonomous motivation captures the extent to which participation is self-endorsed and internally regulated. When psychological needs are satisfied, individuals are more likely to internalize external activities and engage with a sense of personal relevance and intrinsic interest (Ryan and Connell, 1989; Ryan and Deci, 2020). Autonomous motivation is associated with persistence, engagement, and meaningful involvement.

Fourth, identity formation is conceptualized as the process through which individuals integrate values, roles, and experiences into a coherent sense of self. This includes both exploration and commitment processes that define adolescent identity development (Crocetti *et al.*, 2008; Meeus, 2011). Identity formation represents the long-term developmental outcome of sustained engagement and internalization.

Together, these constructs form a sequential chain that links external participation to internal psychological transformation.

5.2 Mechanism Pathways

The conceptual framework specifies three primary mechanism pathways that explain how developmental processes unfold.

The first pathway links participation in scouting activities to psychological need satisfaction. Structured participation provides opportunities for autonomy through choice and self-direction, competence through skill development and challenge, and relatedness through social interaction and group belonging. Empirical evidence indicates that environments offering these features enhance need satisfaction (Jang *et al.*, 2010; Reeve and Cheon, 2021; Aelterman *et al.*, 2019).

The second pathway connects psychological need satisfaction to autonomous motivation. Consistent with Self-Determination Theory, the satisfaction of basic psychological needs fosters intrinsic and self-determined forms of motivation. When individuals feel competent, connected, and autonomous, they are more likely to engage voluntarily and persist in activities (Deci and Ryan, 2000; Howard *et al.*, 2021; Ntoumanis *et al.*, 2021).

The third pathway links autonomous motivation to identity formation. Autonomous motivation facilitates deeper engagement, reflection, and internalization, which are essential for transforming experiences into stable identity commitments. Individuals who engage with a sense of volition are more likely to integrate their experiences into their self-concept (Ryan and Deci, 2020; Jang *et al.*, 2016; Laporte *et al.*, 2021).

Figure 1 presents the mechanism process underlying the model, highlighting the role of engagement, reflection, and social interaction in facilitating internalization and identity development.

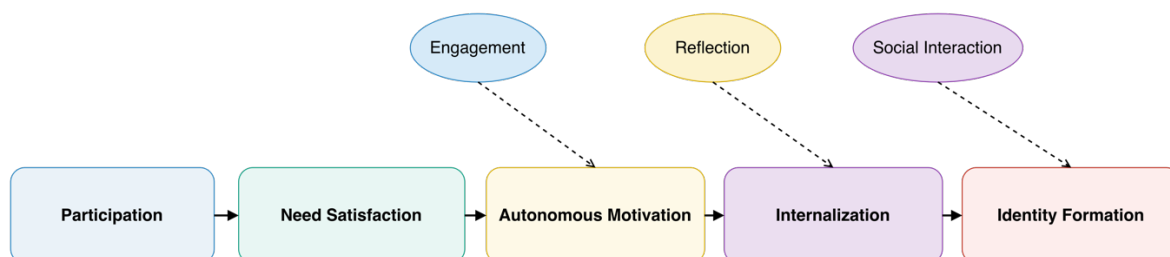


Figure 1. Mechanism Process of Identity Formation through Participation

Source: Developed by the author

As shown in Figure 1, participation leads to need satisfaction and autonomous motivation, which drive internalization. Identity formation emerges from this internalization process rather than from participation directly. Engagement sustains involvement, reflection enables meaning-making, and social interaction reinforces internalization and identity integration. Together, these processes explain how participation is translated into identity over time.

These pathways collectively form a process-based model that explains how participation is translated into identity outcomes through motivational mechanisms.

5.3 Process Dynamics

Beyond linear relationships, the model incorporates dynamic processes that influence the strength and continuity of developmental outcomes.

Internalization represents a central mechanism within the model. It describes the process through which externally structured activities become integrated into the self. This transformation occurs gradually as individuals move from externally regulated behavior

toward autonomous and identity-relevant engagement (Ryan and Connell, 1989; Deci *et al.*, 1991). The extent of internalization determines the depth of identity formation.

Engagement and persistence represent behavioral expressions of autonomous motivation. Individuals who experience need satisfaction are more likely to invest effort, sustain participation, and remain committed to activities over time. Sustained engagement increases exposure to developmental experiences, thereby strengthening identity formation processes (Fredricks and Eccles, 2006; Jang *et al.*, 2016).

Social interaction and belonging further reinforce developmental dynamics. Relatedness satisfaction fosters a sense of belonging that enhances both motivation and identity integration. In group-based contexts such as scouting, peer relationships and shared experiences create feedback mechanisms that support identity construction (Grolnick and Ryan, 1987; Soenens and Vansteenkiste, 2005; Hardy *et al.*, 2015).

These dynamic processes indicate that development is not strictly linear but iterative, with reinforcing cycles that strengthen the relationship between motivation and identity over time.

5.4 Boundary Conditions

The effectiveness of the proposed mechanisms depends on several contextual conditions that influence the strength of relationships within the model.

Program quality plays a critical role in determining whether participation leads to meaningful developmental outcomes. High-quality programs provide structured activities, opportunities for skill development, and supportive environments that enhance need satisfaction and motivation (Durlak *et al.*, 2010; Ciocanel *et al.*, 2017).

Leadership style is another important factor. Autonomy-supportive leadership, characterized by encouragement, provision of choice, and acknowledgment of participants' perspectives, strengthens need satisfaction and promotes autonomous motivation. In contrast, controlling leadership may undermine these processes and reduce engagement (Reeve, 2009; Reeve and Cheon, 2021; Aelterman *et al.*, 2019).

Social environment also influences developmental outcomes. Inclusive and cohesive group settings enhance relatedness and facilitate identity formation, whereas fragmented or exclusionary environments may weaken these processes (Eccles *et al.*, 2003; Larson *et al.*, 2006).

These boundary conditions highlight that developmental mechanisms operate within specific contextual configurations rather than in isolation.

5.5 Theoretical Advancement

The proposed framework offers several theoretical contributions to the literature on youth development.

First, it advances a mechanism-based explanation that specifies how participation leads to developmental outcomes through clearly defined causal pathways. This shifts the focus from descriptive associations to explanatory processes, addressing calls for more theory-driven research in developmental science (Howard *et al.*, 2021; Bureau *et al.*, 2022).

Second, the model integrates Self-Determination Theory, Positive Youth Development, and identity formation into a unified framework. By combining outcome-oriented, motivational, and developmental perspectives, it provides a more comprehensive explanation of youth development processes (Lerner *et al.*, 2015; Ryan and Deci, 2020).

Third, the framework extends the application of Self-Determination Theory into non-formal education contexts, particularly scouting. While SDT has been widely applied in formal education, its use in structured youth organizations remains limited. This study demonstrates

how SDT mechanisms operate in such contexts and highlights their relevance for understanding long-term developmental outcomes (Guay, 2022; Martela and Ryan, 2016).

Overall, the conceptual development presented in this section establishes a theoretically grounded and integrative model that explains how participation in scouting fosters identity formation through motivational mechanisms. This framework provides the foundation for the formal propositions presented in the next section.

6. Conceptual Model and Propositions

This section formalizes the conceptual framework into a set of theoretically grounded and testable propositions. Building on Self-Determination Theory, Positive Youth Development, and identity formation literature, the model specifies explicit causal relationships that connect participation in scouting activities to identity formation through sequential motivational mechanisms (Ryan and Deci, 2020; Ntoumanis *et al.*, 2021; Howard *et al.*, 2021).

The model advances a process-based explanation in which psychological need satisfaction and autonomous motivation function as central mediating constructs. The structure of the model follows a sequential logic in which contextual participation is transformed into internalized identity outcomes through identifiable psychological processes.

6.1 Conceptual Model Structure

The conceptual model is organized into four primary constructs connected through causal pathways.

At the first stage, participation in scouting activities represents structured engagement in experiential, socially embedded programs. These activities provide opportunities for skill development, collaboration, leadership, and value-based learning (Eccles *et al.*, 2003; Hansen *et al.*, 2003).

At the second stage, psychological need satisfaction reflects the fulfillment of autonomy, competence, and relatedness. These needs serve as the primary mechanism through which environmental inputs influence individual development (Deci and Ryan, 2000; Niemiec and Ryan, 2009).

At the third stage, autonomous motivation represents internally regulated engagement characterized by volition and personal endorsement. This construct captures the internalization of participation experiences (Ryan and Connell, 1989; Ryan and Deci, 2020).

At the final stage, identity formation reflects the integration of experiences, values, and roles into a coherent sense of self. This includes both exploration and commitment processes central to adolescent development (Crocetti *et al.*, 2008; Meeus, 2011).

The relationships among these constructs can be understood as a sequential pathway, where participation in scouting activities initiates the satisfaction of psychological needs, subsequently enhancing autonomous motivation and leading to identity formation. This configuration reflects a mechanism-based model, illustrating how external engagement is systematically internalized into meaningful psychological outcomes.

6.2 Representation of the Model

The conceptual model developed in this study is designed to illustrate the sequential mechanism through which participation in scouting activities contributes to identity formation. The model positions participation as the contextual starting point, psychological need satisfaction as the first mediating mechanism, autonomous motivation as the second mediating mechanism, and identity formation as the final developmental outcome. In addition, autonomy supportive environment is positioned as a contextual moderator that

strengthens the structural relationships among the main constructs. Figure 2 presents the proposed conceptual model.

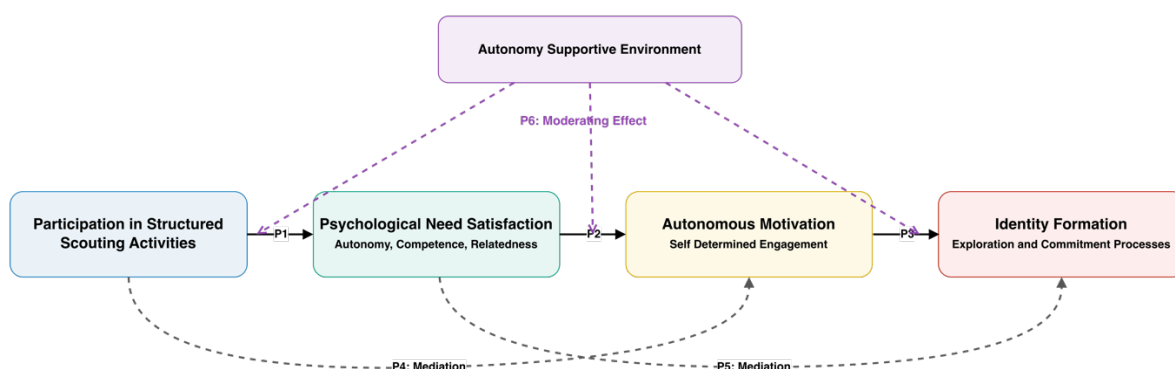


Figure 2. Conceptual Model of Participation, Motivation, and Identity Formation
Source: Developed by the author

As shown in Figure 2, participation in structured scouting activities is expected to foster psychological need satisfaction by providing opportunities for autonomy, competence, and relatedness. Psychological need satisfaction then promotes autonomous motivation, which reflects self-determined engagement and internalized participation. Autonomous motivation subsequently contributes to identity formation by enabling adolescents to integrate scouting experiences, values, and roles into their developing self-concept.

The model also specifies two mediation pathways. First, psychological need satisfaction mediates the relationship between participation and autonomous motivation. Second, autonomous motivation mediates the relationship between psychological need satisfaction and identity formation. These mediation pathways indicate that participation does not directly produce identity formation, but operates through psychological and motivational processes.

Autonomy supportive environment is positioned as a moderator of the main structural pathways. This means that the relationships between participation and need satisfaction, need satisfaction and autonomous motivation, and autonomous motivation and identity formation are expected to be stronger when scouting environments provide meaningful choice, acknowledge participants' perspectives, and support self-initiated engagement. This structure makes the model suitable for future empirical testing using structural equation modeling.

6.3 Direct Relationships

Proposition 1

Participation in scouting activities positively influences psychological need satisfaction.

Structured participation provides opportunities for autonomy through choice and self-direction, competence through skill development and challenge, and relatedness through social interaction and group belonging. Environments that incorporate these features are more likely to satisfy basic psychological needs (Jang *et al.*, 2010; Reeve and Cheon, 2021; Aelterman *et al.*, 2019).

Proposition 2

Psychological need satisfaction positively influences autonomous motivation.

Consistent with Self-Determination Theory, the satisfaction of autonomy, competence, and relatedness fosters intrinsic motivation and self-determined engagement. Individuals who experience need satisfaction are more likely to engage voluntarily and persist in activities (Deci and Ryan, 2000; Ntoumanis *et al.*, 2021; Howard *et al.*, 2021).

Proposition 3

Autonomous motivation positively influences identity formation.

Autonomous motivation facilitates deeper engagement, reflection, and internalization, which are essential for identity development. Individuals who engage with a sense of volition are more likely to integrate their experiences into their self-concept (Ryan and Deci, 2020; Jang *et al.*, 2016; Laporte *et al.*, 2021).

6.4 Mediating Relationships

Proposition 4

Psychological need satisfaction mediates the relationship between participation in scouting activities and autonomous motivation.

Participation influences motivation through the fulfillment of basic psychological needs. Without need satisfaction, participation is less likely to produce autonomous forms of motivation. This mediation reflects the core mechanism proposed by Self-Determination Theory (Ntoumanis *et al.*, 2021; Reeve, 2009).

Proposition 5

Autonomous motivation mediates the relationship between psychological need satisfaction and identity formation.

Autonomous motivation functions as a mechanism that translates need satisfaction into identity outcomes. Individuals who are autonomously motivated are more likely to internalize experiences and develop stable identity commitments (Ryan and Connell, 1989; Ryan and Deci, 2020).

6.5 Moderating Relationships

Proposition 6

Autonomy supportive environments strengthen the relationships among participation, psychological need satisfaction, autonomous motivation, and identity formation.

Autonomy supportive contexts enhance need satisfaction, facilitate internalization, and amplify the effects of participation on developmental outcomes. In such environments, individuals are more likely to experience meaningful engagement and identity development (Reeve and Cheon, 2021; Aelterman *et al.*, 2019).

6.6 Model Implications for Empirical Testing

The proposed conceptual model is designed to be empirically testable using quantitative methods such as structural equation modeling.

Each construct can be operationalized as follows:

- 1) Participation measured through frequency and quality of engagement
- 2) Psychological need satisfaction measured using autonomy, competence, and relatedness scales
- 3) Autonomous motivation measured through self-determination indices
- 4) Identity formation measured through exploration and commitment scales

The model supports the testing of:

- 1) Direct effects among constructs
- 2) Sequential mediation pathways
- 3) Moderating effects of autonomy supportive environments

This structure allows for rigorous empirical validation of the proposed mechanism-based framework.

To facilitate future empirical testing, Table 2 summarizes the key constructs, their functions within the model, and their theoretical foundations.

Table 2. Summarizes the Key Constructs

Stage	Construct	Function in Model	Theoretical Basis
Context	Participation in Scouting Activities	Provides structured developmental experiences	Positive Youth Development
Mechanism 1	Psychological Need Satisfaction	Activates internal psychological processes	Self Determination Theory
Mechanism 2	Autonomous Motivation	Drives engagement and internalization	Self Determination Theory
Mechanism 3	Internalization	Transforms experience into self-endorsed values	Self Determination Theory
Outcome	Identity Formation	Represents long term developmental result	Identity Formation Theory
Contextual Factor	Autonomy Supportive Environment	Strengthens all structural relationships	Self Determination Theory

Source: Developed by the author

Table 2 demonstrates that the proposed model operates through a sequence of interconnected mechanisms in which contextual participation activates psychological processes that ultimately lead to identity formation. This structure supports the development of testable hypotheses and provides a clear basis for empirical validation using structural equation modeling.

6.7 Summary of Propositions

The model is summarized through the following propositions:

P1: Participation positively influences psychological need satisfaction

P2: Psychological need satisfaction positively influences autonomous motivation

P3: Autonomous motivation positively influences identity formation

P4: Psychological need satisfaction mediates the relationship between participation and motivation

P5: Autonomous motivation mediates the relationship between need satisfaction and identity formation

P6: Autonomy supportive environments strengthen all structural relationships

7. Discussion

This section interprets the proposed conceptual model within broader theoretical and empirical contexts. It demonstrates how the model advances understanding of youth development mechanisms by integrating participation, motivation, and identity into a unified explanatory framework. By shifting the focus from outcome-based descriptions to process-based explanations, the model contributes to a more comprehensive and theoretically grounded account of how developmental outcomes emerge in structured youth settings (Howard *et al.*, 2021; Ntoumanis *et al.*, 2021; Ryan and Deci, 2020).

7.1 Theoretical Contributions

The first major contribution of this study lies in advancing a mechanism-based theory of youth development. Existing research has largely emphasized associations between participation in youth activities and developmental outcomes without clearly specifying the underlying

causal processes (Eccles *et al.*, 2003; Fredricks and Eccles, 2006). By identifying psychological need satisfaction and autonomous motivation as central mediating mechanisms, the proposed model responds to recent calls for more process-oriented theorizing in developmental science (Bureau *et al.*, 2022; Howard *et al.*, 2021). This shift enhances explanatory precision and allows for a deeper understanding of how developmental change occurs.

The second contribution concerns the integration of Self-Determination Theory and identity formation. While SDT has been widely used to explain motivation and internalization, and identity theory has focused on exploration and commitment, these domains have rarely been systematically combined. The present framework bridges this gap by positioning autonomous motivation as the mechanism linking need satisfaction to identity development (Ryan and Deci, 2020; Crocetti *et al.*, 2008; Meeus, 2011). This integration extends the explanatory scope of SDT beyond proximal outcomes such as engagement, demonstrating its relevance for long-term developmental constructs.

The third contribution lies in addressing fragmentation within youth development literature. Positive Youth Development provides a framework for identifying developmental outcomes, but lacks detailed explanations of underlying processes. By incorporating SDT as a mechanism-based foundation, the model complements PYD and transforms it into a more explanatory framework. This integration contributes to the development of a more coherent and unified theory of youth development (Lerner *et al.*, 2015; Guay, 2022).

The fourth contribution is the extension of theoretical application to non-formal education contexts, particularly scouting. Despite its global presence, scouting has been underrepresented in academic theory. By conceptualizing scouting as a developmental system characterized by experiential learning, social interaction, and value-based education, this study demonstrates how established theories can be applied to non-formal contexts (Dibben *et al.*, 2017; Szałachowski *et al.*, 2024). This expands the scope of both SDT and PYD and highlights the relevance of non-formal education in developmental research.

Finally, the study contributes by introducing a multi-level perspective that connects individual psychological processes with social and contextual factors. By incorporating individual, group, and contextual dimensions, the model reflects contemporary relational-developmental approaches and provides a more comprehensive understanding of how development unfolds (Lerner *et al.*, 2005; Larson *et al.*, 2006).

7.2 Implications for Youth Development Practice

The proposed conceptual model provides several important implications for the design and implementation of youth development programs.

First, the findings highlight the importance of designing autonomy supportive programs. Environments that provide meaningful choice, encourage self-direction, and acknowledge participants' perspectives are more likely to satisfy psychological needs and foster autonomous motivation (Reeve and Cheon, 2021; Aelterman *et al.*, 2019). Program designers should therefore prioritize flexibility, participant involvement, and supportive leadership practices.

Second, the model emphasizes the need to enhance engagement and motivation through structured experiences. Programs should provide optimally challenging activities, opportunities for skill development, and constructive feedback to strengthen competence and persistence (Jang *et al.*, 2016; Hansen *et al.*, 2003). Such conditions are essential for sustaining participation and facilitating deeper developmental processes.

Third, the framework underscores the importance of social relationships in youth development. Supportive peer interactions and a strong sense of belonging contribute to relatedness satisfaction, which enhances both motivation and identity formation. Program

structures should therefore encourage collaboration, group cohesion, and inclusive participation (Soenens and Vansteenkiste, 2005; Hardy *et al.*, 2015).

Fourth, the model suggests that youth programs should explicitly focus on identity development as a core objective. Rather than emphasizing only short-term outcomes such as skill acquisition, programs should incorporate reflective activities, leadership opportunities, and value-based experiences that support identity formation. This shift toward long-term developmental goals can enhance the overall effectiveness of youth interventions.

7.3 Implications for Future Research

The proposed model opens several directions for future research.

First, empirical validation of the model is essential. Quantitative studies using structural equation modeling can test the mediating roles of psychological need satisfaction and autonomous motivation. Experimental designs can examine the impact of autonomy supportive interventions on developmental outcomes (Ntoumanis *et al.*, 2021; Reeve, 2009).

Second, future research should adopt longitudinal designs to capture the dynamic nature of youth development. Identity formation unfolds over time, and longitudinal studies can provide insights into how participation, motivation, and identity evolve across developmental stages (Meeus, 2011; Crocetti *et al.*, 2008). Such designs are particularly important for testing causal pathways and internalization processes.

Third, cross-cultural validation is needed to assess the generalizability of the model. Cultural contexts may influence how autonomy, relatedness, and identity are experienced, and testing the model across different settings can strengthen its theoretical robustness (Martela *et al.*, 2021; Guay, 2022).

Fourth, future research can extend the model by incorporating additional variables such as individual differences, personality traits, and contextual constraints. For example, autonomy orientation or socio-economic factors may influence how individuals respond to developmental environments. Including these variables can enhance the explanatory power of the model.

Fifth, mixed-method approaches can provide deeper insights into the mechanisms underlying youth development. Qualitative studies can explore how individuals experience participation and internalization, complementing quantitative findings and enriching theoretical understanding.

7.4 Concluding Integration of Findings

Taken together, the discussion demonstrates that youth development should be understood as a psychologically mediated process in which contextual participation interacts with motivational mechanisms to produce identity outcomes. The proposed framework provides a coherent explanation of this process by integrating participation, need satisfaction, autonomous motivation, and identity formation into a unified model.

By advancing a mechanism-based perspective, the study contributes to a more precise and comprehensive understanding of youth development in structured settings. It highlights the importance of integrating multiple theoretical perspectives and emphasizes the role of motivation as a central driver of developmental change.

8. Conclusion

This study develops a mechanism-based conceptual framework to explain how participation in scouting activities contributes to identity formation through motivational processes grounded in Self-Determination Theory. By integrating Positive Youth Development, Self-

Determination Theory, and identity formation literature, the study moves beyond outcome-oriented explanations and provides a process-based understanding of youth development.

The proposed model demonstrates that participation in structured youth activities influences identity formation through sequential pathways involving psychological need satisfaction and autonomous motivation. Psychological need satisfaction serves as the primary mechanism linking contextual experiences to individual motivation, while autonomous motivation facilitates the internalization of experiences into a coherent sense of self. This framework highlights that identity development is not a direct result of participation, but a psychologically mediated process shaped by engagement, internalization, and social interaction.

Theoretically, the study contributes by advancing a mechanism-based perspective that clarifies how developmental processes unfold in youth contexts. It integrates previously fragmented domains into a unified framework, extends the application of Self-Determination Theory to non-formal education settings, and positions motivation as a central mechanism in identity development. These contributions enhance both the explanatory power and coherence of youth development theory.

Practically, the findings suggest that youth programs should prioritize environments that support autonomy, competence, and relatedness in order to foster meaningful engagement and long-term developmental outcomes. Programs that incorporate structured participation, supportive leadership, and opportunities for reflection are more likely to facilitate identity formation and sustained personal growth.

Despite its contributions, the study is conceptual in nature and requires empirical validation. Future research should test the proposed relationships using quantitative and longitudinal designs, examine the model across diverse cultural contexts, and explore additional variables that may influence developmental processes. Such efforts will strengthen the robustness and applicability of the framework.

In conclusion, this study provides a theoretically grounded and integrative model that explains how participation in scouting activities fosters identity formation through motivational mechanisms. By emphasizing the role of psychological processes, the framework offers a deeper and more comprehensive understanding of youth development in non-formal educational contexts.

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