

## **Positive Pedagogical Practices, Extracurricular Involvement, Community & School Citizenship, and Acquisition of 21st-Century Skills Among Secondary Students from Indonesia, Kyrgyzstan and Tanzania**

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### **ABSTRACT**

This research examines the role of positive pedagogical practices, extracurricular involvement, and community and school citizenship on the acquisition of the 21st century skills of Skill development, cognitive engagement and reflective learning. Data were collected from a sample of 864 secondary school students from the total of 63 schools from the three countries, namely, Indonesia, Kyrgyzstan, and Tanzania where the NAMA Foundation is operating the school improvement programs. This study is a small portion of the large-scale dataset evaluating the effectiveness of the NAMA interventions in the respective countries. Data were collected using an instrument that was designed and standardized for data collection across all schools in the project. Results were analyzed using the Smart PLS program, version 4, first, to determine the validity and reliability of the instruments and second to test the hypotheses of the study. An attempt was made to find out if the hypothesized model fits the data and secondly if there are any differences among students from Indonesia, Kyrgyzstan, and Tanzania on the measured constructs. The findings underscore a significant relationship between extracurricular involvement, community & school citizenship, and the development of 21st-century skills, mediated by positive pedagogical practices. Notably, no significant differences were observed among the participating countries, suggesting the potential universal applicability of these relationships across diverse cultural and geographical contexts. This research contributes to the discourse on effective educational practices, highlighting the importance of holistic approaches that encompass extracurricular engagement and community participation, facilitated by innovative teaching strategies. The insights gleaned underscore the critical role of contextually relevant pedagogies in equipping Muslim youth with the necessary competencies for success in the contemporary global landscape. The findings contribute to highlighting the significance of the interventions carried out by NAMA Foundation and similar efforts around the world.

**Keywords:** *Positive Pedagogical Practices, Extracurricular Involvement, Community & School Citizenship, 21st Century Skills,*

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## INTRODUCTION

In the ever-evolving landscape of education, the emphasis on 21st-century skills has become paramount, reflecting the need to equip students with competencies that transcend traditional academic knowledge. This study delves into the effects of extracurricular involvement and community & school citizenship on the acquisition of 21st-century skills among secondary students in three diverse countries—Indonesia, Kyrgyzstan, and Tanzania. Additionally, it investigates the mediating role of perceptions of positive pedagogical practices in shaping this relationship. The geographical focus on countries where the NAMA Foundation is actively engaged adds a contextual layer to the exploration, acknowledging the influence of cultural nuances on educational dynamics.

### ***Background***

The imperative to foster 21st-century skills in the educational landscape is well-recognized (Hattie, 2016). Extracurricular involvement and a sense of community and school citizenship are identified as catalysts for skill development beyond the conventional classroom setting (Denhardt & Denhardt, 2015). These activities provide practical platforms for students to enhance problem-solving and interpersonal skills (Furco, 1996). Cultivating a sense of belonging and responsibility aligns with the broader goals of 21st-century education (Lu, Bridges & Hmelo-Silver, 2014).

The NAMA Foundation's initiative to transform Muslim educational institutions in Indonesia, Kyrgyzstan, and Tanzania underscores the importance of exploring the effects of extracurricular involvement and community & school citizenship on 21st-century skill acquisition (González-Pérez & Ramírez-Montoya, 2022). Understanding these factors within the specific cultural and educational milieus represented by the NAMA Foundation's engagement is crucial for developing contextually relevant programs. Recognizing the impact of contextual differences on the relationship between extracurricular involvement, community & school citizenship, and the acquisition of 21st-century skills is pivotal for tailoring effective educational strategies (Goleman, 2020).

### ***21st-century Skills and the Educational Landscape for Muslim Youth***

The dynamic educational landscape for Muslim youth is influenced by cultural shifts, technological advancements, and the broader global context (Shani, 2022; Sahin, 2018). Pedagogical approaches are evolving globally towards more inclusive and participatory methods, emphasizing active involvement and collaboration (Dede, 2010). The contemporary job market's demands highlight the need for a holistic approach to education and the recognition of 21st-century skills, essential for navigating the complexities of the modern workforce (Trilling & Fadel, 2009). Student

engagement in school and community environments is integral to holistic development, influencing cognitive development, social well-being, and emotional resilience (Fredricks et al., 2016).

21st-century skills, often termed "future-ready" or "soft skills," are crucial for success in the contemporary world (Partnership for 21st Century Skills, 2009). These skills encompass a broad set of abilities, including critical thinking, problem-solving, creativity, effective communication, collaboration, digital literacy, adaptability, resilience, initiative, cultural awareness, self-direction, social and emotional intelligence, and leadership skills (Cefai & Cavioni, 2014; Denhardt & Denhardt, 2015).

Equipping individuals with these skills is essential for success not only in the workplace but also in various aspects of life, fostering lifelong learning and adaptability (Trilling & Fadel, 2009). The need for equipping Muslim youth with these skills carries significant societal and economic implications (Smith, Fischer, & Vignoles, 2011).

Despite ongoing transformations, a gap exists in current educational approaches, emphasizing the need for innovative pedagogies, extracurricular activities, and enhanced student engagement (Saavedra & Opfer, 2012). The overarching purpose of this study is to empirically investigate the interplay of student-centered pedagogies, extracurricular activities, and student engagement in the school and community, shedding light on the interconnected relationships among these factors and providing evidence-based recommendations for optimizing educational experiences for Muslim youth (Banks, 2019; Podsakoff et al., 2003).

### ***Extracurricular Involvement & 21st Century Skills***

Extracurricular activities contribute significantly to the acquisition of 21st-century skills (Eccles & Gootman, 2002). These activities, ranging from sports to clubs and community service, provide students, including Muslim youth, with opportunities to explore interests, develop new skills, and foster a sense of community and belonging (Mahoney et al., 2003).

Participation in extracurricular activities plays a crucial role in the holistic development of students, contributing to the development of transferable skills such as teamwork, leadership, time management, and communication (Fredricks et al., 2016). This linkage between extracurricular participation and skill acquisition is particularly relevant for Muslim youth, emphasizing the broader impact of these activities on personal and academic growth (Abu-Raiya, Pargament, & Mahoney, 2011).

Considering extracurricular activities for Muslim youth requires addressing cultural and religious considerations. Creating an inclusive and respectful environment involves aligning these activities with Islamic values, ensuring accessibility for all students (Belousova et al., 2019). Recognizing and respecting the cultural and religious diversity within this

context enriches the educational experience and fosters a sense of belonging among Muslim youth (Ozalp & Cefurovic, 2021).

Participation in extracurricular activities fosters the acquisition of a wide range of skills essential for success in the 21st century (Bunting & Moshuus, 2017). Examples below illustrate how these activities contribute to the development of specific skills. Communication and Collaboration are enhanced by Joining a debate club or a theater group, which enhances students' ability to express thoughts clearly, actively listen to others, and collaborate with peers (Wentzel, 2022). Critical Thinking and Problem Solving are developed, for instance, by participating in robotics competitions or math clubs challenges students to analyze problems, think critically, and devise effective solutions, promoting their problem-solving skills (Ruiz-Martin & Bybee, 2022). Creativity and Innovation are developed, among others, by participating in art, music, or creative writing clubs allows students to explore their creative side, fostering innovation and thinking outside the box (Tromp & Sternberg, 2022).

Additionally, adaptability and Flexibility are developed by being part of a sports team or drama club exposes students to dynamic and unpredictable environments, enhancing their ability to adapt and be flexible (Denhardt & Denhardt, 2015). Leadership and Initiative have been enhanced by taking on leadership roles in student government or community service projects instills responsibility, encourages initiative, and develops team motivation and guidance skills (Gardner, 2020). Time Management and Organization are acquired by balancing academic responsibilities with extracurricular participation teaches students the importance of effective time management, organization, and setting priorities (Bempechat & Cheung, 2022).

Moreover, skills like Social and Emotional Intelligence can be acquired by engaging in team sports or group projects helps develop emotional intelligence, empathy, and social skills crucial for effective collaboration and communication (Baumsteiger et al., 2022). Technological Literacy can be enhanced by joining a coding club or participating in technology-related activities enhances students' technological literacy, preparing them for the demands of the modern workforce (OECD, 2019). Cultural Awareness and Global Citizenship have been developed through participation in cultural exchange programs or international clubs fosters cultural awareness, tolerance, and a sense of global citizenship (Jackson, 2018). Finally, Self-direction and Accountability have been grown through Pursuing individual projects or research outside the regular curriculum encourages students to take ownership of their learning, be self-directed, and be accountable for their progress (Zimmerman, 2013).

In a nutshell, extracurricular activities, therefore, serve as a rich and dynamic context for students to acquire and hone 21st-century skills, providing them with practical experiences that complement traditional

### ***Community and School Citizenship and 21st Century Skills***

The importance of student engagement in educational settings extends far beyond the confines of classroom attendance. Engaged students actively participate in learning, interact with educational content, and contribute to a vibrant academic community. Research consistently indicates that student engagement correlates positively with academic achievement, cognitive development, and overall well-being.

Community involvement represents an extension of student engagement beyond the classroom, providing a real-world context for skill development and application. Engaging with the community through service learning, civic initiatives, and extracurricular activities enhances a student's skill set in diverse dimensions, including teamwork, leadership, and a heightened awareness of social issues.

Central to the holistic development of students is the cultivation of a sense of belonging and purpose, both within the school environment and the broader community. Actively participating in school events, clubs, and extracurricular activities fosters a sense of community and shared identity. This positive school culture contributes to the overall learning experience and supports a supportive and inclusive environment.

Student engagement in both the school and community plays a crucial role in the acquisition of 21st-century skills. Active participation in classroom discussions, group projects, and extracurricular activities enhances communication skills. It allows students to collaborate with peers and teachers, fostering an environment that supports effective communication (Fredricks et al., 2016). Involvement in community projects or service-learning activities provides opportunities for students to communicate and collaborate with diverse groups, developing a broader understanding of effective communication (Eyler & Giles, 1999). It has been demonstrated that engaged students often show improved critical thinking skills through analyzing information, solving problems, and making informed decisions within academic settings (Fredricks et al., 2016). Real-world challenges encountered through community engagement require students to apply critical thinking skills to propose solutions and address issues affecting their local or global communities (Billig & Waterman, 2014).

On the other hand, participating in creative projects, arts, and interdisciplinary activities within the school setting fosters creativity and innovative thinking (Craft, 2003). In community service or collaborative projects, students often encounter novel situations that demand creative problem-solving and innovative approaches (Zimmerman, 2013). Moreover, engagement in diverse learning experiences within the school environment helps students adapt to various teaching styles, subjects, and classroom dynamics, fostering adaptability (Appleton et al., 2006).

Exposure to community challenges cultivates adaptability as students navigate different environments, cultures, and social contexts (Jokisaari, 2013).

Besides, leadership opportunities within school clubs, student government, or team activities allow students to develop leadership skills and take initiative (Komives, Lucas, & McMahon, 2013). Engaging in community projects encourages students to take on leadership roles, initiating positive change and contributing to the community's well-being (Eccles & Gootman, 2002). Balancing academic and extracurricular commitments in the school setting contributes to effective time management and organizational skills (Eccles & Gootman, 2002). Involvement in community service requires students to manage their time effectively, balancing academic responsibilities with active participation in community activities (Denhardt & Denhardt, 2015).

Positive relationships with teachers and peers within the school environment contribute to the development of social and emotional intelligence (Fredricks et al., 2016). Interacting with diverse community members enhances students' social and emotional intelligence by fostering empathy, cultural understanding, and interpersonal skills (Follman, 2017). Integrating technology into classroom activities and projects enhances students' technological literacy within the academic context (ISTE, 2016). In community-based projects, students may utilize technology to address issues, contributing to their proficiency in using digital tools for real-world problem-solving (Partnership for 21st Century Skills, 2009).

Exposure to diverse perspectives and multicultural education within the school setting promotes cultural awareness (Banks, 2019). Engaging with the community exposes students to different cultures, fostering global citizenship by promoting an understanding of interconnectedness and global issues (UNESCO, 2015). Opportunities for independent projects, research, or self-directed learning within the school contribute to the development of self-direction (Paris & Paris, 2001). Taking responsibility for community initiatives and projects encourages students to be accountable for their actions and decisions, reinforcing a sense of personal responsibility (Follman, 2017).

In summary, student engagement in both the school and community environments provides a multifaceted platform for the acquisition and application of 21st-century skills. The synergistic relationship between school and community engagement enriches the learning experience, preparing students for the complexities of the contemporary world.

### ***Student-Centered Pedagogies and 21st Century Skills***

Student-centered pedagogies, emphasizing active involvement, collaboration, and personalized learning experiences, represent a paradigm shift in teaching and learning (Ahmed & Mikail, 2023). Student

agency, a key factor in skill acquisition within student-centered pedagogies, empowers learners to take an active and intentional role in their learning process (Klemencic, 2017). Major student-centered pedagogies include Project-Based Learning (PBL), Inquiry-Based Learning, Flipped Classroom, Cooperative Learning, Service-Learning, Collaborative Learning, Choice-Based Learning, Peer Teaching, and Self-Directed Learning (Hattie, 2009; Prince, 2004). These approaches demonstrate diverse methods within student-centered pedagogies, emphasizing active participation, collaboration, and student agency (Johnson et al., 2014).

Recognizing the diversity of cultural values is crucial in creating inclusive learning environments within student-centered pedagogies (Serin, 2018). This adaptability contributes to a learning environment that honors and celebrates cultural diversity (Torres & Salifu, 2023). Student-centered pedagogies play a crucial role in fostering the acquisition of 21st-century skills by actively engaging students in the learning process (Trilling & Fadel, 2009).

Here are several ways in which student-centered pedagogies contribute to the development of 21st-century skills. Student-centered approaches, such as project-based learning and case studies, provide real-world scenarios fostering the application of critical thinking skills (Hmelo-Silver, 2004). Cooperative learning strategies within student-centered classrooms emphasize collaboration and communication, developing effective communication skills (Slavin, 1995). Open-ended assignments and creative projects in student-centered pedagogies allow students to explore creativity, fostering innovative thinking and problem-solving skills (Sharmin et al., 2019). Research-based projects and inquiry-based learning, common in student-centered classrooms, contribute to the development of information literacy skills (Buchanan et al., 2016).

On the other hand, practices like flipped classrooms, common in student-centered approaches, promote self-directed learning and time management skills (Buchanan et al., 2016). Varied learning activities and exposure to diverse perspectives help students adapt to different situations, contributing to the development of adaptability and flexibility (Klemencic, 2017). Also, inclusive and culturally responsive teaching within student-centered classrooms promotes cultural competence and understanding (Sharmin et al., 2019). Integration of technology tools in student-centered approaches enhances digital literacy and technological proficiency (Cefai & Cavioni, 2015). Moreover, by encouraging curiosity and a love for learning, student-centered pedagogies instill a mindset of lifelong learning (Trilling & Fadel, 2009). Ultimately, student-centered approaches facilitate individualized feedback, supporting continuous improvement (Serin, 2018).

In summary, student-centered pedagogies create dynamic and interactive learning environments aligning with the skills needed in the

21st century (Torres & Salifu, 2023). These pedagogies foster not only academic knowledge but also critical thinking, collaboration, adaptability, and other essential skills for success in the modern world (Partnership for 21st Century Skills, 2009).

### ***Research Gap and Purpose of the Study***

In the intricate realm of educational research, identifying gaps becomes a compass guiding scholars towards unexplored territories. The need for empirical investigation arises from the recognition that despite the ongoing transformations in education, there is still much to explore regarding the specific interplay of student-centered pedagogies, extracurricular activities, and student engagement, especially within the context of Muslim youth.

The significance of understanding the interplay of student-centered pedagogies, extracurricular activities, and student engagement lies in the holistic development of individuals within the context of modern education. It is not merely an academic exercise but a crucial step towards equipping Muslim youth with the skills necessary for success in the 21st century.

The overarching purpose of this study is to empirically investigate the interplay of student-centered pedagogies, participation in extracurricular activities, and student engagement in the school and community, and how these factors collectively influence the acquisition of 21st-century skills among Muslim youth. The research objectives, spanning from examining the impact of pedagogies to understanding mediating factors, aim to provide a comprehensive understanding that can inform educational practices, policies, and interventions tailored to the unique needs of Muslim youth.

The present study specifically aimed to accomplish the following objectives:

1. To assess the influence of extracurricular involvement on the acquisition of 21st-century skills among secondary students.
2. To examine the impact of community & school citizenship on the development of 21st-century skills.
3. To explore the mediating role of perceptions of positive pedagogical practices in the relationship between extracurricular involvement, community & school citizenship, and the acquisition of 21st-century skills.
4. To find out differences among secondary students from Indonesia, Kyrgyzstan, and Tanzania on the influence of extracurricular involvement, community & school citizenship and perceptions of positive pedagogical practices on the acquisition of 21st-century skills among secondary students.

The above objectives were reflected in the following hypotheses:

H1: There is a significant positive impact of extracurricular involvement



on the acquisition of 21<sup>st</sup> century skills.

H2: There is a significant positive impact of community & school citizenship on the acquisition of 21<sup>st</sup> century skills.

H3: There is a significant positive impact of extracurricular involvement on perceptions of positive pedagogical practices.

H4: There is a significant positive impact of community & school citizenship on perceptions of positive pedagogical practices.

H5: There is a significant positive impact of perceptions of positive pedagogical practices on the acquisition of 21<sup>st</sup> century skills.

H6: Positive pedagogical practices mediate the relationship the effect of extracurricular involvement on the acquisition of 21<sup>st</sup> century skills.

H7: Positive pedagogical practices mediate the relationship the effect of community & school citizenship on the acquisition of 21<sup>st</sup> century skills.

H8: There are significant differences in the effects of extracurricular involvement, community & school citizenship, and positive pedagogical practices on the acquisition of 21<sup>st</sup> century skills among different countries (Indonesia, Kyrgyzstan, and Tanzania).

By addressing these questions and hypotheses, this study endeavored to provide evidence-based insights that can contribute to the ongoing discourse on effective educational strategies, particularly within the distinct cultural and geographical contexts represented by Indonesia, Kyrgyzstan, and Tanzania.

## **METHODOLOGY**

To test the research hypotheses of the study, we used a cross-sectional survey implemented in the three countries (Indonesia, Kyrgyzstan and Tanzania). The study applied the Partial Least Square Structural Equation Modeling (PLS-SEM) technique using Smart PLS-4. PLS-SEM represents a well-substantiated method for estimating complex cause-effect-relationship models in social science research (Hair et al., 2014). The study utilized convenience sampling technique. The study sample comprised of students from each of the 63 schools in those three countries where NAMA foundation intervention programs are being implemented. The total sample was 864 high school students, being 361 from Indonesia, 258 from Kyrgyztan, and 245 from Tanzania. In PLS-SEM, the guideline is that the sample size should be ten times the number of arrows pointing at a variable (Hair et al., 2014). In the present study, there are in total 5 arrows pointing to the variables in the conceptual model. Hence, the requirement for representativeness would be 50 valid surveys. The sample size in the present study is well above the required level in each of the countries. The questionnaires were distributed in English in Tanzania (English is one the two official languages for communication in this country). In Indonesia, the questionnaire was distributed in both English and Indonesian (Bahasa Indonesia). Similarly, in Kyrgyzstan, the questionnaire was distributed in both English and Kyrgyz. The

translations into Indonesian and Kyrgyz were made by certified consultants and verified by academic experts of those languages.

The items used in this study were selected from a large dataset collected by NAMA foundation for the purpose of evaluating its programs. These self-constructed surveys focused on three main areas namely, school life, learning success, and culture and values. In the present study, only items from the learning success and culture and values domains that were deemed to represent our constructs of interest were analyzed. In the first part of the questionnaire, demographic questions were asked including country, school, age, and gender. In the second part, items for measuring students' school life (SLS), Learning Success (LSS), and culture and values (CVS) were included. Items were measured with 5-point Likert-scales where 1 meant strong disagreement and 5 meant strong agreement. Items were selected to represent extracurricular involvement (SLS1), community and school citizenship (SLS2), perceptions of positive pedagogical practices (LSS1) and acquisition of the 21st century skills of problem solving and collaborative communication (LSS2). Table 1 shows the items that were included in each variable.

**Table 1. Scale Items**

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<i>Extracurricular involvement</i>	
SLS11	activities (sports, games, dance, music, drama)
SLS13	competitions-outside my school (such as Math, chess, soccer).
SLS14	science fairs or exhibitions.
SLS15	school club (for example journalism club/garden club/ computer club).
<i>Community &amp; school citizenship</i>	
SLS21	activities to help my community such as cleaning up, handing out food parcels.
SLS22	activities where I have to work with other students as a team.
SLS23	activities that help to make the school a better place.
SLS24	activities where every students' opinion is important even if it is different from mine.
SLS32	When I am absent from school, I bring a document to school explaining why I was absent (doctor's report, letter from my family...).
<i>Perceptions of positive pedagogical practices</i>	
LSS11	When the teachers explain, I understand the lessons very well.
LSS13	The teachers use material from outside the books to help us understand
LSS14	My school helps me become better at computer skills.
LSS15	I work in groups in class on activities and projects.
<i>Acquisition of 21st century skills</i>	
LSS21	I work on activities/projects that need thinking.
LSS22	When I work on activities, I need to come up with solutions to problems.
LSS23	The activities/ projects are related to my life outside the school.
LSS25	After we finish an activity /project, the teacher asks us to think about what we learned from the activity/projects.

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## **RESULTS AND DISCUSSION**

### ***Introduction***

This section presents results of the analysis, starting with the reliability and validity of the study's variables, crucial for ensuring the robustness of the findings. Employing Cronbach's Alpha and Composite Reliability (CR) to test reliability, the study meticulously filtered items based on factor loadings, retaining those with substantial contributions. The assessment encompassed both the collective sample and individual country-specific analyses, revealing that all reliability measures surpassed the standard thresholds, indicating strong internal consistency. Convergent validity was confirmed through satisfactory Average Variance Extracted (AVE) and CR values, while discriminant validity was established through cross-loadings and further corroborated by the Fornell & Larcker criterion and the Heterotrait-Monotrait Method (HTMT), ensuring the distinctiveness of constructs. This methodological rigor underpins the study's credibility, setting a solid foundation for examining the hypothesized relationships within and across the diverse contexts of Indonesia, Kyrgyzstan, and Tanzania.

### ***Reliability and validity***

The reliability of the variables was tested using Cronbach's Alpha and Composite Reliability (CR). Initially, the overall sample was assessed and items having factor loadings that were smaller than 0.600 were discarded. The results for reliability and validity along with the factor loadings for the remaining items are presented in Table 3 for the overall sample and for each country-specific sample. All the Alpha values and CRs for the overall sample were higher than the recommended value of 0.700. There were variations in the Alpha values and CRs for individual countries (i.e., Indonesia, Kyrgyzstan and Tanzania). The Average Variance Extracted (AVE) and CRs were all higher or close to 0.500 and 0.700, respectively, which indicates that the measures had adequate convergent validity. (See Appendices 1-4 for the model diagrams of Indonesia, Kyrgyzstan, Tanzania and the overall sample).

Table 2. Item loadings, reliability and validity

	Indonesia				Kyrgyzstan				Tanzania				Overall Sample							
	λ	Alpha	CR	AVE	VIF	λ	Alpha	CR	AVE	VIF	λ	Alpha	CR	AVE	VIF	λ	Alpha	CR	AVE	VIF
SLS11	0.7	0.551	0.563	0.745	1.163	0.823	0.705	0.734	0.816	1.461	0.697	0.620	0.619	0.772	1.104	0.804	0.710	0.731	0.820	1.391
SLS13	0.526				1.125	0.722				1.373	0.601				1.312	0.68				1.312
SLS14	0.672				1.170	0.664				1.328	0.737				1.419	0.737				1.382
SLS15	0.692				1.144	0.686				1.370	0.67				1.157	0.694				1.272
SLS21	0.631	0.629	0.632	0.771	1.222	0.76	0.655	0.666	0.784	1.392	0.602	0.671	0.675	0.792	1.153	0.715	0.725	0.820	0.500	1.340
SLS22	0.621				1.163	0.621				1.202	0.652				1.256	0.689				1.310
SLS23	0.69				1.262	0.645				1.268	0.768				1.492	0.707				1.384
SLS24	0.655				1.194	0.675				1.258	0.61				1.219	0.704				1.352
SLS32	0.575				1.118	0.534				1.121	0.649				1.223	0.635				1.218
LSS11	0.613	0.498	0.500	0.726	1.086	0.49	0.539	0.574	0.739	1.101	0.744	0.712	0.734	0.823	1.382	0.688	0.700	0.814	0.522	1.273
LSS13	0.681				1.130	0.626				1.136	0.829				1.605	0.759				1.384
LSS14	0.605				1.093	0.673				1.142	0.591				1.173	0.698				1.268
LSS15	0.626				1.102	0.771				1.201	0.758				1.435	0.743				1.303
LSS21	0.67	0.629	0.632	0.771	1.177	0.76	0.586	0.608	0.759	1.238	0.803	0.765	0.769	0.850	1.597	0.791	0.713	0.820	0.500	1.459
LSS22	0.657				1.165	0.613				1.156	0.793				1.574	0.737				1.383
LSS23	0.629				1.156	0.714				1.201	0.704				1.348	0.695				1.291
LSS25	0.699				1.164	0.562				1.135	0.762				1.441	0.706				1.282

Discriminant validity was assessed through cross-loadings. Multicollinearity was also assessed, with the value of each indicator's Variance Inflation Factor (VIF) being less than 5.

Additionally, discriminant validity was also assessed by using cross-loadings. Table 2 shows the cross-factor loadings of all the items. It is observed that all the factor loadings were greater than their cross-loadings, which is a sign of discriminant validity.

Table 3: Discriminant validity – cross loadings

	Indonesia				Kyrgyzstan				Tanzania				Overall Sample			
	SLS1	SLS2	LSS1	LSS2	SLS1	SLS2	LSS1	LSS2	SLS1	SLS2	LSS1	LSS2	SLS1	SLS2	LSS1	LSS2
SLS11	0.700	0.313	0.325	0.190	0.823	0.484	0.387	0.421	0.697	0.359	0.372	0.342	0.804	0.533	0.519	0.463
SLS13	0.526	0.252	0.161	0.184	0.722	0.389	0.273	0.343	0.601	0.301	0.128	0.243	0.680	0.399	0.308	0.331
SLS14	0.672	0.296	0.282	0.217	0.664	0.422	0.186	0.329	0.737	0.413	0.330	0.227	0.737	0.458	0.407	0.331
SLS15	0.692	0.328	0.338	0.192	0.686	0.404	0.158	0.312	0.670	0.409	0.351	0.234	0.694	0.467	0.378	0.347
SLS21	0.346	0.631	0.291	0.331	0.498	0.760	0.334	0.472	0.430	0.602	0.413	0.335	0.547	0.715	0.481	0.460
SLS22	0.284	0.621	0.316	0.331	0.374	0.621	0.316	0.320	0.342	0.652	0.411	0.345	0.433	0.689	0.445	0.431
SLS23	0.378	0.690	0.408	0.311	0.352	0.645	0.245	0.382	0.411	0.768	0.416	0.378	0.427	0.707	0.413	0.415
SLS24	0.259	0.655	0.326	0.352	0.327	0.675	0.358	0.409	0.335	0.610	0.251	0.386	0.422	0.704	0.408	0.482
SLS32	0.181	0.575	0.335	0.299	0.341	0.534	0.310	0.346	0.290	0.649	0.414	0.337	0.373	0.635	0.445	0.403
LSS11	0.252	0.292	0.613	0.322	0.168	0.133	0.490	0.275	0.309	0.438	0.744	0.344	0.366	0.392	0.688	0.390
LSS13	0.198	0.384	0.681	0.312	0.138	0.262	0.626	0.365	0.376	0.484	0.829	0.442	0.366	0.475	0.759	0.455
LSS14	0.393	0.345	0.605	0.129	0.305	0.337	0.673	0.359	0.404	0.384	0.591	0.174	0.505	0.468	0.698	0.332
LSS15	0.278	0.316	0.626	0.284	0.304	0.442	0.771	0.442	0.293	0.412	0.758	0.421	0.399	0.495	0.743	0.492
LSS21	0.180	0.323	0.313	0.670	0.416	0.482	0.438	0.760	0.273	0.434	0.409	0.803	0.426	0.522	0.484	0.791
LSS22	0.141	0.341	0.255	0.657	0.262	0.353	0.327	0.613	0.296	0.434	0.367	0.793	0.340	0.465	0.398	0.737
LSS23	0.194	0.282	0.292	0.629	0.407	0.482	0.364	0.714	0.295	0.393	0.277	0.704	0.361	0.446	0.356	0.695
LSS25	0.268	0.402	0.260	0.699	0.155	0.222	0.380	0.562	0.340	0.392	0.420	0.762	0.368	0.426	0.457	0.706

Thirdly, discriminant validity was also tested using the criterion suggested by Fornell & Larcker and the Heterotrait-Monotrait Method (HTMT). The results of both tests are presented in Table 3. Both the Fornell & Larcker

criterion and the Heterotrait-Monotrait Method (HTMT) results indicated that the measures used in the study enjoyed acceptable discriminant validity.

Table 4:  
Discriminant validity using the criterion by Fornell & Larcker and Heterotrait- Monotrait Method (HTMT)

	LSS1	LSS2	SLS1	SLS2
LSS1	<i>0.632</i>	<i>0.775</i>	<i>0.820</i>	<i>0.942</i>
LSS2	<i>0.419</i>	<i>0.664</i>	<i>0.525</i>	<i>0.842</i>
SLS1	<i>0.438</i>	<i>0.298</i>	<i>0.651</i>	<i>0.771</i>
SLS2	<i>0.529</i>	<i>0.511</i>	<i>0.458</i>	<i>0.635</i>
<b>Indonesia</b>				
LSS1	<i>0.648</i>	<i>0.996</i>	<i>0.540</i>	<i>0.763</i>
LSS2	<i>0.563</i>	<i>0.667</i>	<i>0.710</i>	<i>0.927</i>
SLS1	<i>0.365</i>	<i>0.489</i>	<i>0.726</i>	<i>0.856</i>
SLS2	<i>0.482</i>	<i>0.598</i>	<i>0.585</i>	<i>0.651</i>
<b>Kyrgyzstan</b>				
LSS1	<i>0.735</i>	<i>0.634</i>	<i>0.664</i>	<i>0.840</i>
LSS2	<i>0.484</i>	<i>0.766</i>	<i>0.558</i>	<i>0.758</i>
SLS1	<i>0.462</i>	<i>0.392</i>	<i>0.678</i>	<i>0.841</i>
SLS2	<i>0.585</i>	<i>0.539</i>	<i>0.551</i>	<i>0.659</i>
<b>Tanzania</b>				
LSS1	<i>0.723</i>	<i>0.816</i>	<i>0.787</i>	<i>0.890</i>
LSS2	<i>0.581</i>	<i>0.733</i>	<i>0.705</i>	<i>0.881</i>
SLS1	<i>0.565</i>	<i>0.512</i>	<i>0.730</i>	<i>0.881</i>
SLS2	<i>0.636</i>	<i>0.636</i>	<i>0.641</i>	<i>0.691</i>
<b>Overall Sample</b>				

SLS1 = Extracurricular involvement

SLS2 = Community & school citizenship

LSS1 = Perceptions of positive pedagogical practices

LSS2 = Acquisition of 21<sup>st</sup> century skills

### ***Structural model***

The next step in our analysis was to assess the hypothesized relationships. First, direct relationships were tested. Results from this analysis are presented in detail in Table 4. The results for Indonesia are presented first, followed by the results for Kyrgyzstan, then the results for Tanzania, and finally the results for the overall sample. The findings presented in Table 4 show that all of the hypotheses of the study were positively and significantly supported for the overall sample.

**Table 5: Direct relationships (Hypotheses H1 to H6).**

	Indonesia			Kyrgyzstan			Tanzania			Overall Sample		
	$\beta$	T	P	$\beta$	T	P	$\beta$	T	P	$\beta$	T	P
LSS1	0.19	2.99	0.00	0.33	6.15	0.00	0.23	3.53	0.00	0.26	7.839	0.00
->	8	8	3	9	6	0	8	8	0	9		0
LSS2												
SLS1	0.24	4.18	0.00	0.12	1.57	0.11	0.20	2.82	0.00	0.26	7.244	0.00
->	7	6	0	6	9	4	1	2	5	7		0
LSS1												
SLS1	0.03	0.56	0.56	0.16	2.73	0.00	0.08	1.42	0.15	0.10	2.970	0.00
->	2	9	9	8	6	6	9	8	3	5		3
LSS2												
SLS2	0.41	7.92	0.00	0.40	5.78	0.00	0.47	7.21	0.00	0.46	13.88	0.00
->	6	0	0	9	0	0	4	2	0	5	7	0
LSS1												
SLS2	0.39	6.63	0.00	0.33	5.98	0.00	0.35	4.75	0.00	0.39	10.75	0.00
->	1	1	0	6	8	0	1	3	0	7	0	0
LSS2												

SLS1 = Extracurricular involvement

SLS2 = Community & school citizenship

LSS1 = Perceptions of positive pedagogical practices

LSS2 = Acquisition of 21<sup>st</sup> century skills

Second, the findings also reveal that the results for each country specific sample were somehow different from the findings for the overall sample. For instance, in the Indonesian sample, the results reveal that, except for SLS1 -> LSS2  $**(\beta=0.032, t=0.569, p=0.569)$ , all the other hypotheses were also positive and significant. Similarly the results for Kyrgyzstan indicated that except for SLS1 -> LSS1 ( $\beta =0.126, t=1.579, p=0.114$ ), all the other hypotheses were also positive and significant. Finally, the results for Tanzania indicated that except for SLS1 -> LSS2 ( $\beta =0.089, t=1.428, p=0.153$ ), all the other hypotheses were also positive and significant. Therefore, hypotheses H1 to H6 are accepted.

### **Mediation analysis**

Results for the analysis of the mediated relationships are presented next. The results for Indonesia are presented first, followed by the results for Kyrgyzstan, then the results for Tanzania, and finally the results for the overall sample (Table 7).

Results of mediation analysis revealed that the mediating role of LSS1 between SLS2 and LSS2 was significant for the overall sample as well as for Indonesia, Kyrgyzstan and Tanzania. However, the mediating role of LSS1 between SLS1 and LSS2 was significant for the overall sample as well as for Indonesia and Tanzania, but was not significant for Kyrgyzstan SLS1 -> LSS1 -> LSS2 ( $\beta =0.043, t=1.473, p=0.141$ ).

Table 6: Mediation analysis (Hypothesis H7).

**Table 6: Mediation analysis (H7)**

	Indonesia			Kyrgyzstan			Tanzania			Overall Sample		
	$\beta$	T	P	$\beta$	T	P	$\beta$	T	P	$\beta$	T	P
Total Effect	0.0	1.4	0.14									
SLS1->LSS2	81	53	6	0.2	3.2	0.00	0.1	2.1	0.03	0.1	4.99	0.0
Total Effect	0.4	9.3	0.00									
SLS2->LSS2	74	65	0	0.4	7.8	0.00	0.4	7.8	0.00	0.5	16.5	0.0
Direct Effect												
SLS1->LSS2	0.0	0.5	0.56	0.1	2.7	0.00	0.0	1.4	0.15	0.1	2.97	0.0
Direct Effect	32	69	9	68	36	6	89	28	3	05	0	03
Indirect Effects												
SLS2->LSS2	0.3	6.6	0.00	0.3	5.9	0.00	0.3	4.7	0.00	0.3	10.7	0.0
SLS1->LSS2	91	31	0	36	88	0	51	53	0	97	50	00
LSS1->LSS2	0.0	2.7	0.00	0.1	4.2	0.00	0.1	3.1	0.00	0.1	6.96	0.0
SLS1->LSS2	82	18	7	39	11	0	13	78	1	25	6	00
LSS1->LSS2	0.0	2.4	0.01	0.0	1.4	0.14	0.0	2.0	0.04	0.0	5.21	0.0
LSS2	49	41	5	43	73	1	48	30	2	72	4	00

SLS1 = Extracurricular involvement, SLS2 = Community & school citizenship, LSS1 = Perceptions of positive pedagogical practices, LSS2 = Acquisition of 21<sup>st</sup> century skills

**Multi-group analysis**

As a last step in the analysis, we evaluated the significant differences that existed in the effects of Extracurricular involvement and Community & school citizenship on the Acquisition of 21st century skills among the different countries explored in the paper (i.e., Indonesia, Kyrgyzstan and Tanzania). The hypothesis H8 was tested using multi-group analysis (Table 7).

The findings revealed that the differences were only significant when comparing the Perceptions of positive pedagogical practices and Acquisition of 21st century skills between Indonesia and Kyrgyzstan (path diff= -0.142, p=0.050). All the other differences in the hypothesized relationships were found insignificant. Therefore, the hypothesis H8 to was not supported by our findings. This fact shows that the outcomes of effects of Extracurricular involvement, Community & school citizenship and Perceptions of positive pedagogical practices on the Acquisition of 21st century skills quite similar in Indonesia, Kyrgyzstan and Tanzania (González-Pérez & Ramírez-Montoya, 2022).

**Table 7: Multi-group comparison (Hypothesis H8).**

	Path diff. (Indonesia- Kyrgyzstan )	p-value (Indonesia- Kyrgyzstan )	Path diff. (Indonesia -Tanzania)	p-value (Indonesia -Tanzania)	Path diff. (Kyrgyzstan -Tanzania)	p-value (Kyrgyzstan -Tanzania)
LSS 1 -> LSS 2	-0.142	0.050	-0.040	0.335	0.102	0.122
SLS 1 -> LSS 1	0.121	0.110	0.046	0.313	-0.075	0.242
SLS 1 -> LSS 2	-0.136	0.052	-0.056	0.252	0.079	0.183
SLS 2 -> LSS 1	0.008	0.468	-0.058	0.245	-0.066	0.248
SLS 2 -> LSS 2	0.055	0.248	0.040	0.336	-0.015	0.433

SLS1 = Extracurricular involvement, SLS2 = Community & school citizenship, LSS1 = Perceptions of positive pedagogical practices, LSS2 = Acquisition of 21<sup>st</sup> century skills

## DISCUSSION AND CONCLUSION

The present study aimed to investigate the relationships between extracurricular involvement (SLS1), community and school citizenship (SLS2), perceptions of positive pedagogical practices (LSS1), and the acquisition of 21st-century skills (LSS2) across three diverse countries: Indonesia, Kyrgyzstan, and Tanzania. The discussion is organized into four main sections: common method bias, reliability and validity, structural model, mediation analysis, and multi-group analysis.

Reliability and validity were assessed using Cronbach's Alpha, Composite Reliability (CR), factor loadings, and discriminant validity tests. The high values of Cronbach's Alpha and CR for the overall sample indicated strong internal consistency. The factor loadings for the remaining items were above 0.600, meeting the recommended threshold. Discriminant validity was confirmed through cross-loadings, with all factor loadings greater than their cross-loadings, and through the Fornell & Larcker criterion and Heterotrait-Monotrait Method, demonstrating acceptable discriminant validity (Fornell & Larcker, 1981; Henseler et al., 2015).

The structural model analysis tested direct relationships, revealing significant support for hypotheses H1, H2, H3, H4, H5, H6, and H7 across the overall sample. Hypothesis H8 was not supported for the overall sample. However, variations were observed in the country-specific samples, emphasizing the importance of examining cultural nuances in



educational contexts (Jokisaari, 2013).

Mediation analysis demonstrated significant mediating roles of perceptions of positive pedagogical practices (LSS1) in the relationships between community and school citizenship (SLS2) and the acquisition of 21st-century skills (LSS2) for all countries (Ahmed & Mikail, 2023; Johnson et al., 2014, Klemencic, 2017). However, the mediating role of LSS1 between extracurricular involvement (SLS1) and LSS2 was significant for Indonesia and Tanzania but not for Kyrgyzstan. This finding underscores the importance of considering contextual differences in the mediation processes within the educational systems of each country (Jokisaari, 2013).

The multi-group analysis assessed the differences in the effects of extracurricular involvement and community & school citizenship on the acquisition of 21st-century skills among the three countries. The hypothesis H8, predicting significant differences, was not supported. This suggests that while there are variations in direct relationships and mediating factors, the overall impact of extracurricular involvement and community & school citizenship on the acquisition of 21st-century skills is quite similar across Indonesia, Kyrgyzstan, and Tanzania (González-Pérez & Ramírez-Montoya, 2022).

Research question 1 asked how extracurricular involvement influence the acquisition of 21st-century skills among secondary students. There was a significant positive impact of extracurricular involvement on the acquisition of 21st-century skills. Extracurricular involvement facilitates the development of essential 21st-century skills, aligning with previous findings that these activities enhance interpersonal and problem-solving skills (Furco, 1996; Eccles & Gootman, 2002). The alignment with the NAMA Foundation's goals and the broader educational objectives for holistic skill development (Lu, Bridges & Hmelo-Silver, 2014; González-Pérez & Ramírez-Montoya, 2022) underscores the importance of culturally and contextually relevant extracurricular activities. The positive effects on skill acquisition among Muslim youth further emphasize the need for inclusive activities that respect cultural and religious values (Abu-Raiya, Pargament, & Mahoney, 2011; Belousova, Hassan, & Lampkin, 2019).

Research question number 2 focused on what is the impact of community & school citizenship on the development of 21st-century skills. Analysis revealed that there was a significant positive impact of community & school citizenship on the acquisition of 21st-century skills. This finding underscores the role of civic engagement and community participation in nurturing key competencies such as critical thinking and social responsibility (Flanagan & Levine, 2010). This aligns with the theory of social capital, where community ties and networks are seen as valuable resources that contribute to personal and social development (Putnam, 2000). It also aligns with 21st-century educational objectives

that advocate for a comprehensive approach, encompassing cognitive, social, and emotional aspects of student development (Denhardt & Denhardt, 2015; Goleman, 2020). Engaging students in community and school citizenship initiatives offers practical experiences that are crucial for cultivating a broad range of future-ready skills (Partnership for 21st Century Skills, 2009). Furthermore, the emphasis on civic engagement and community participation is critical for skill development, aligning with the values of multicultural education and the promotion of prosocial behavior (Banks, 2019; Caprara et al., 2014). This approach fosters a sense of belonging and responsibility, crucial for holistic development in diverse educational contexts. The results suggest that schools that foster a strong sense of community and citizenship can enhance students' readiness for the challenges of the 21st century.

Research question number 3 inquired whether perceptions of positive pedagogical practices mediate the relationship between extracurricular involvement, community & school citizenship, and the acquisition of 21st-century skills. Analysis revealed that positive pedagogical practices significantly mediate the relationship, enhancing the acquisition of 21st-century skills. The mediating role of positive pedagogical practices highlights the importance of effective teaching strategies in translating extracurricular and civic experiences into meaningful learning outcomes (Darling-Hammond, 2000). This aligns with constructivist theories, which advocate for active learning environments where students construct knowledge through experiences and reflections (Piaget, 1954). The mediation by positive pedagogical practices highlights the transformative potential of student-centered teaching approaches in linking extracurricular and civic experiences to skill development (Ahmed & Mikail, 2023; Saavedra & Opfer, 2012). This underscores the evolving landscape of pedagogical strategies that prioritize active learning and collaboration, key aspects of student-centered learning (Dede, 2010). The incorporation of culturally responsive teaching within these pedagogies is essential for creating inclusive learning environments that respect and celebrate diversity, thereby optimizing the educational experiences of Muslim youth and other diverse student groups (Serin, 2018; Torres & Salifu, 2023).

Research question number 4 focused on whether there were differences among secondary students from Indonesia, Kyrgyzstan, and Tanzania regarding the influence of extracurricular involvement, community & school citizenship, and perceptions of positive pedagogical practices on the acquisition of 21st-century skills. No significant differences were found among the countries in the effects of the studied variables on skill acquisition. The consistency of the study's findings across diverse cultural contexts supports the notion of a universal framework for enhancing 21st-century skills through extracurricular involvement, community & school citizenship, and positive pedagogical

practices (Smith, Fischer, & Vignoles, 2011). However, the lack of significant differences invites further exploration into the nuanced interplay between global educational strategies and local cultural traditions, emphasizing the importance of culturally sensitive approaches to education (Stewart, 2007; Ozalp & Ćufurović, 2021). This suggests that while the core relationships may be broadly applicable, their implementation should be adapted to respect and integrate local values and practices. Therefore, while the study's findings offer promising insights, they also call for a nuanced understanding of how global educational principles interact with local traditions and practices.

### ***Implications***

The findings of this study carry several implications for educational policy, practice, and future research, shedding light on the nuanced relationships between extracurricular involvement, community and school citizenship, perceptions of positive pedagogical practices, and the acquisition of 21st-century skills in diverse cultural contexts. The main implication is regarding educational policy and practice. The first consideration is cultural tailoring of educational interventions. The variations observed in the direct relationships and mediation processes across Indonesia, Kyrgyzstan, and Tanzania suggest the importance of culturally tailoring educational interventions. Policymakers and educators should consider adapting programs to the unique cultural characteristics of each context to maximize their effectiveness (OECD, 2019; Banks, 2019). Secondly, and this is exactly what NAMA Foundation has embarked upon, is enhancing positive pedagogical practices. Given the mediating role of perceptions of positive pedagogical practices, educators should prioritize strategies that enhance positive teaching and learning environments. Professional development programs should focus on equipping teachers with skills that foster positive perceptions among students (Leithwood & Jantzi, 2008). Another practice that is highlighted by the findings is promoting extracurricular involvement and citizenship. The positive relationships observed between extracurricular involvement, community and school citizenship, and the acquisition of 21st-century skills highlight the importance of fostering these aspects in educational settings. Schools should encourage participation in extracurricular activities and promote a sense of citizenship to contribute to holistic skill development (Mahoney, Cairns, & Farmer, 2003).

### ***Future Research Directions***

To get a clearer idea about what is exactly happening in the communities of interest, longitudinal study designs will have to be employed. To better understand the dynamic nature of the relationships identified in this study, future research could employ longitudinal designs. Longitudinal studies would allow for the examination of how these relationships evolve over

time, offering insights into the sustainability of the observed effects (Bryman, 2016). While NAMA Foundation has collected data from 2021 and 2022, the way the data is structured makes it impossible to know whether the respondents in both years are the same, and it is impossible to trace individual respondents across different time periods. Another possible area to consider is expanding the scope of cross-cultural comparisons beyond the three countries investigated in this study. This could provide a more comprehensive understanding of the cultural influences on educational dynamics. Including a more diverse set of countries would contribute to the generalizability of findings and uncover additional cultural nuances (Smith, Fischer, & Vignoles, 2011). Moreover, there is a need for further exploration of the mechanisms through which positive pedagogical practices mediate the relationships between extracurricular involvement, community and school citizenship, and the acquisition of 21st-century skills is warranted. Identifying specific teaching practices that contribute to skill development would offer practical insights for educators and policymakers (Hattie, 2009).

### ***Limitations***

While this study contributes valuable insights to the understanding of the relationships between extracurricular involvement, community and school citizenship, positive pedagogical practices, and the acquisition of 21st-century skills, several limitations should be acknowledged. Firstly, the cross-sectional design employed in this study limits the ability to establish causality. Future research could employ longitudinal designs to examine the temporal dynamics of these relationships and provide a more robust understanding of the causal pathways. Secondly, the reliance on self-report measures for variables like extracurricular involvement, community and school citizenship, and perceptions of positive pedagogical practices introduces the potential for response bias. Future studies could incorporate objective measures or multi-source assessments to enhance the reliability of data. Moreover, the study focused on three specific countries (Indonesia, Kyrgyzstan, and Tanzania), limiting the generalizability of findings to other cultural contexts. Future research should include a more diverse set of countries to increase the external validity of the study.

In conclusion, this study provides valuable implications for the design of culturally sensitive educational policies and practices that aim to enhance 21st-century skills through extracurricular involvement, community and school citizenship, and positive pedagogical practices. The suggested avenues for future research contribute to the ongoing dialogue on effective educational strategies in diverse global contexts.

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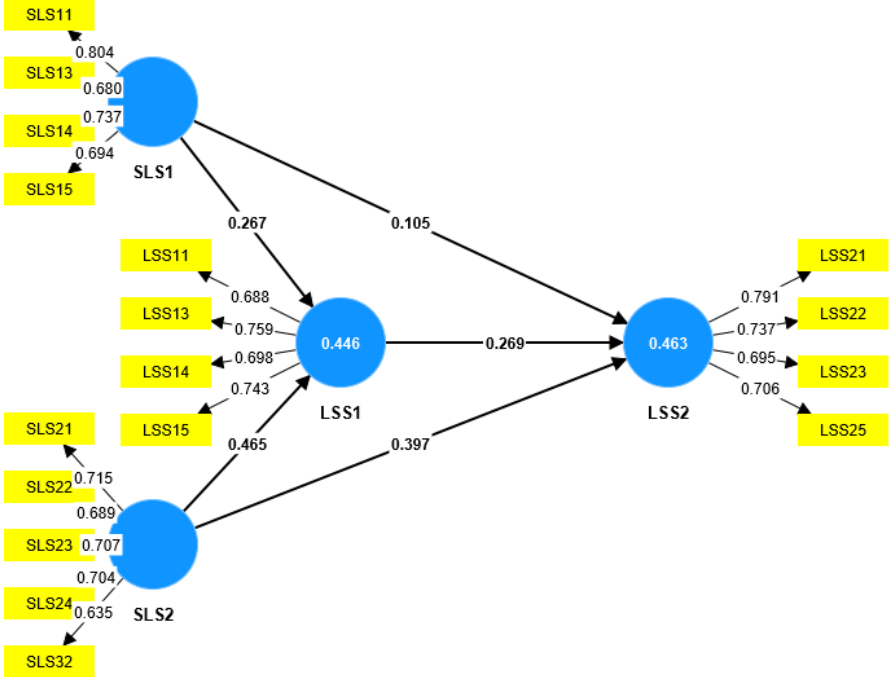


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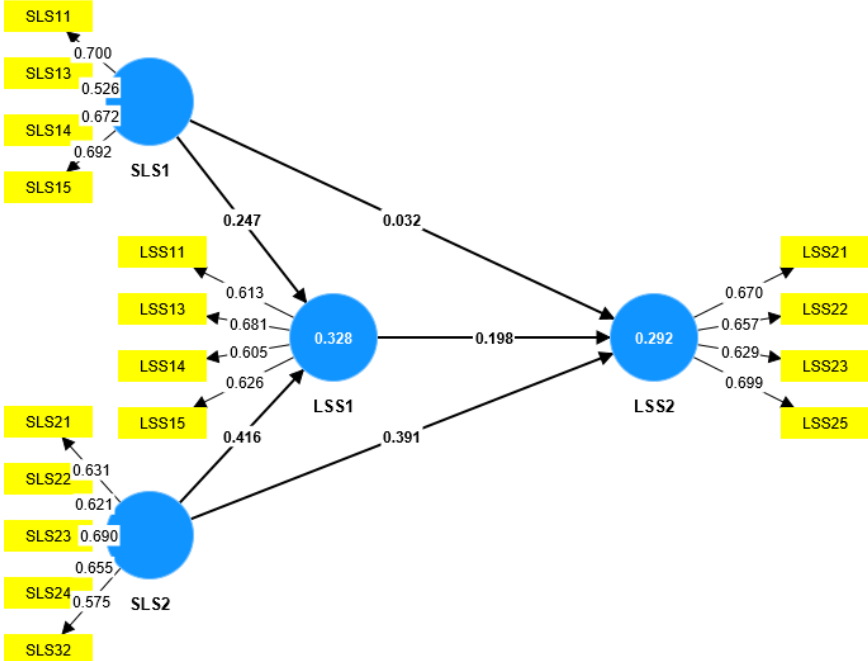
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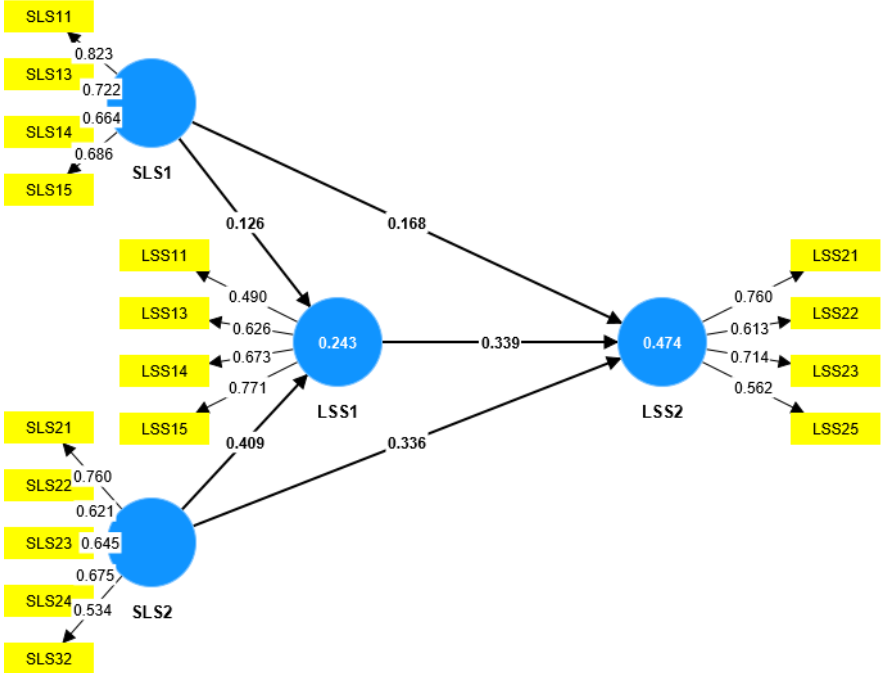
APPENDIX 1 INDONESIA MODEL



APPENDIX 2 KYRGYZSTAN MODEL



**APPENDIX 3 TANZANIA MODEL**



**APPENDIX 4 OVERALL SAMPLE MODEL**

