

Educational Experiences of the B'laan Tribe: Identifying Culturally Responsive and Contextual Factors in Learning

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Abstract

The study sought to determine the current learning experiences and conditions of B'laan tribe and identify factors associated with human capital development for B'laan tribe. Qualitative approaches were utilized in the first phase of the study. Focus Group Discussions (FGDs) and Key Informant Interviews (KII) were conducted to selected participants coming from the B'laan tribal chieftain (Fulong), representative from Barangay Council, representative from the Non-Government Organizations, and ordinary B'laan people from the community. Moreover, quantitative approaches were also used in this study in order to determine the factors derived from the qualitative data. Exploratory factor analysis (EFA) was used to establish the factors. A confirmatory factor analysis (CFA) using latent curve analysis of structural equation modeling was also utilized to confirm the validity of these dimensions as determinants of human capital development framework for B'laan tribe. The analysis uncovered a robust framework for human capital development for the B'laan tribe in education, noted with good fit indices. Further, model trimming exposed that two significant factors persist, hence appreciating that certain types of education like contextualized education and eco-based education are quite critical, yet not all that the B'laan desire. Results revealed themes centering on the current learning experiences and conditions of B'laan tribe through the curriculum implemented by the Department of Education is not culture sensitive. Peace and security were one of the factors that impeded education. The EFA revealed dimensions linked to human capital development framework for B'laan tribe which included free education, community resource-based education, contextualize-based education, human security-based education, right-based education, voice-based education, culture-based education, indigenous knowledge-based education, eco-based education, and sustainable education. All these factors were confirmed by CFA to constitute a valid framework of human capital development for B'laan tribe in the context of education.

Keywords: educational experiences, B'laan Tribe, culture, responsive factors, contextual factors, human capital development framework



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INTRODUCTION

Education spurs development not only on the individual but also on the societal level. In the context of the indigenous people (IP), meaningful and relevant education can be an instrument for the maintenance and respect of cultures, traditions, traditional knowledge, languages, and even the exercise of human rights for equal, substantive and sustainable development. However, despite the jurisprudence by the International Human Rights Instruments provided for the security and protection of the IPs, there exists a serious education gap between them and the non- IPs. This is particularly evident in the face of exploitation and deprivation that have hobbled, if not, prevented the development of the IPs' lives in almost all aspects. In fact, in the rural areas of Ecuador, 90% of IPs are illiterate.

Seventy-five percent of IPs from Guatemala are not in school. Moreover, in Somali region, a current survey revealed that 72.5% of pastoralists are illiterate (The United Nations Permanent Forum on Indigenous Issues, 2010). Furthermore, Fiagoy (2000) reported that discrimination against IPs as mirrored in the country's programs and policies, can be one of the many factors that explain why IPs in the Philippines could hardly finish their studies and chose to quit schooling. Considered as the most marginalized and the poorest groups in the Philippines, the IPs have experienced discrimination in the access to basic social services of the government (Bayod, 2014). What is even more discriminatory is that the locality with highest concentration of IPs in the country got the smallest budget allocation from the national government last 2008 (Cariño, 2012).

As in many other countries, however, when the government cannot provide the basic needs of the marginalized and the least of the society, Non-Government Organizations (NGOs) would always pitch in and compensate. In the Philippines, especially in the Northeastern part of Mindanao there are initiatives implemented by an NGO to establish education for IPs in Mindanao, particularly in Surigao del Sur. One of which is the Alternative Learning Center for Agriculture and Livelihood Development (ALCADEV) through which students are taught indigenous knowledge, appropriate technology and sustainable agriculture. This school, under the management of an NGO, has been adopting a culture-sensitive curriculum for IP students. It is no doubt that the attendance and survival rate of the IP students in this school is quite high. Reportedly, the IPs are usually harassed by some military personnel with the blessing from the government officials who conspire with mining companies. The ALCADEV school was assailed with the suspicion that the learning center and its pedagogy are allegedly aimed at training the indigenous students to be a part of the New People's Army (NPA) fighters. The government dismissed the fact that the NGO was just delivering an alternative education that is suited for the culture and tradition of the IPs (Bayod, 2014). Thus, indigenous students manifest a countenance of emotional fear and insecurity (Beyer, 2015) making the development human capital a relevant matter for IPs.

The development of human capital encompasses the process of equipping people with the relevant skills and knowledge to increase their incentive in the social and economic sphere. There are programs for human enrichment, academics, and training to polish individual. Investment in human capital enables societies to achieve prosperity and create innovation leading to a high standard of living. The development of human capital, viewed from the perspective of cultural inclusivity has to be taken seriously in indigenous groups. Indigenous identities are not only preserved in such initiatives but developed through the design of educational and training that tap into these communities' customs and cultural values. It empowered other educated

tribe members to be advocates and voice their tribe, because the more people who have an education, the more likely they can fight for your rights as a tribe and empower other indigenous voices in bigger issues of society. The researcher envisions a B'laan education human capital development approach as the commitment loop. The researcher previously served as an educator, environmentalist and community organizer and believes that it plays a role in people's commitment to the issue. The same researcher currently doing fieldwork in the Brazilian Amazon, Ahuna Monsour, assists local families through outreach activities and has personal experience outdoors. The researcher, with more than nine years of teaching experience, including five as a community extension provider, knows how important it is to understand the very specific educational requirements of the IPs. It is the current researcher's belief that education should not only be attentive to the customs and value systems in these communities, but it also has to be culturally appropriate. Therefore, the current research intends to pinpoint effective ways to teach without undermining the cultural identity of these B'laan people.

LITERATURES

The B'laan Tribe: Then and Now. There are more than forty (40) different ethnic groups in the Philippines, each distinct in culture and language. Some of these ethnic groups can be considered as 'Tribal Groups'. They are 'indigenous groups' who still behave in a traditional way. Each group lives in a specific region in one of the islands of the country (Bagatila, 2011). On the whole, there are 12 to 17 million indigenous peoples (IPs) in the country (Beyer, 2015). In Mindanao there are eighteen (18) tribal groups. Among the most popular IPs are the T'boli and B'laan. The B'laan is one of the major indigenous cultural communities in Koronadal and General Santos City. It derived its name from "bla" meaning "opponent" or "house" and the suffix "an" which means people. In other words, B'laan means "people living in the house". Other terms used to refer to this group are B'laan, Bira-an, Vilanes, and Bilanes (Bagatila, 2011).

In a B'laan family, the husband dominated over the wife. The husband is like a slave master while the wife holds little rights. Polygamy is being practiced by wealthy men who could afford the bride-price (Joshua Project, 2016).

As to agricultural activity of the B'laan, the tribe practice Kaingin (swidden or slash and burn) for their land. They believe in the idea that kaingin adds fertilizer to their farm and ashes from burnt foliage or plants will serve as nutrition for the soil (Caresma, 2011). They also practice river fishing and hunting. Rice, corn, sugarcane, banana, papaya, and root crops are their primary crops (Joshua Project, 2016).

“Education is a key tool in combating poverty, in promoting peace, social justice, human rights, democracy, cultural diversity and environmental awareness. Education for peace implies an active concept of peace through values, life skills and knowledge in a spirit of equality, respect, empathy, understanding and mutual appreciation among individuals, groups and nations” (International Journal of Studies in Education, 2017).

The imperative values that education must inculcate include the promotion of cultural diversity and the appreciation of unique Indigenous Peoples' identities, especially for the members of the B'laan tribe. Education is well-grounded on a strong policy framework under the IPRA, with support from the United Nations Declaration on the Rights of Indigenous Peoples in 2007 and the Philippine Constitution (Abayao, 2014). In fact, despite huge efforts such as the Education for All program and Alternative Learning System Curriculum intended especially for IPs, Bayod (2014) research suggests that the curriculum is typically not culturally relevant.

This literature attempts to discuss and assess the impacts of policies and curricula of education in terms of promoting culturally sensitive education to the indigenous group, namely, the B'laan tribe in the Philippines. Although policies like the Indigenous Peoples' Rights Act and initiatives from the Department of Education are already established, there still

seems to be a gap in using curricula with specific awareness of distinct indigenous groups (United Nations Permanent Forum on Indigenous Issues, 2007).

The study aims to discover the different barriers that prevent the B'laan from accessing and succeeding in education and to suggest strategies to enhance attainment on educational access and cultural relevance, thus bettering empowerment and self-determined development among the Indigenous Peoples.

Free Education. Beyer (2015) stated that education projects and programs such as Indigenous Peoples' Education Framework are implemented to cater the needs of IPs. Indigenous knowledge is taught in the school as well as the suitable technology and sustainable agriculture. In fact, they suggested that there must be a system of education that is open and free for IPs (Manila Bulletin, July 14, 2014).

Espesor (2013) reveals that the B'laan is but one of the numerous Indigenous communities of the country, which faces economic problems because what they earn from farming is very meager to pay for school fees and supplies. Economic constraint bars them from paying school fees and regular supplies, so it prevents some children from acquiring quality education. Therefore, an awful cycle remains: a cycle of poverty. Thus, these economic problems form important barriers, and these serve to discourage the community from investing in the education of children, thus impacting their development and the prospects that they will eventually secure.

The Canadian government has demonstrated a strong commitment to supporting Indigenous students by allocating \$341 million for secondary education, which covers various needs such as tuition and transportation. This investment acknowledges historical injustices faced by Indigenous populations and aims to ensure access to quality education, promoting inclusivity. In contrast, the situation of the B'laan tribe highlights the importance of political will and government investment in

education to address barriers and foster greater equity in educational opportunities.

Literacy among the adult population in Indigenous Peoples (IPs) areas is still low and outweighed by the majority of people; hence, such unfavorably contrasts the economic, social, and health benefits of this global community, according to UNESCO's 2010 EFA Global Monitoring Report, cited by Inter-Agency Support Group on Indigenous Peoples' Issues, 2014. The Philippine Constitution has provided a holistic system of education that the Governance of Basic Education Act of 2001 or RA 9155 recognized, as it stated that free basic education shall be a right to constitutional provision to promote skills, knowledge, and self-reliance. On the other hand, the Right to Education Project expresses that the right should have progressive access to primary, secondary, and higher education should be progressively free.

The literatures sought to investigate the IPs, specifically the B'laan in pursuit of quality education meshed with the current educational policies. The Indigenous Peoples' Education Framework motivates programs that are meant to meet indigenous needs, but there remains a question about how these dimensions inadequately supports these specific mechanisms including: geographic inequalities, low education quality, and unavailability of educational materials. These literatures provide the current study a benchmark on how Canada spent their education funds on indigenous peoples. Through this, the country can explore and adapt their practice in application to the B'laan tribe specific on their education.

Community Resource-Based Education. In Pongoleel, Muling and Plinggang, Sarangani Province the B'laan's means of preserving and storing food widely practiced. In fact, rice and corn are stored in lehub (drum -like storage tank made of bark of the lob and dlung trees). They even dry kubong (poisonous wild yam), soak it in salt to remove its poison and mix it with rice for food reservation when scarcity comes. They also store corn, rice, and beans in tiral (a bamboo canister) to ensure the

continuity and survival of their varieties (Espesor, 2013). This coping mechanism of B'laan tribe in seed banking is a form of education that needs to be restored as means mitigating hunger when natural calamities occur.

To sustain this sample culture of B'laan tribe, the Department of Education implemented an Alternative Learning System (ALS) Curriculum for Indigenous Peoples Education. The ALS educational modules consist of fundamental proficiency, basic, and auxiliary levels. These modules were based on the Indigenous Peoples Rights Act (IPRA) or Republic Act No. 8371. Under this program, IPs learn community management of supply and demand. It entails the indigenous means of earning, living, and caring for their communal source of life (Department of Education, 2010).

The economic practices of B'laan tribe as cited above may be included in the learning curriculum and teach B'laan financial management. However, in the study conducted by the International Work Group for Indigenous Affairs (IWGIA), lack of school building in the community, and the values, norms and traditions of mainstream community being taught in the school were found to have ignored the cultures and history of IPs.

Episcopal Commission on Indigenous Peoples mentioned that indigenous community-based implies the full participation of the community in managing and establishing the educational intervention for IPs. It is more than intervention within physical space or school.

The framework is on community management and financial skills; however, there seems to be a gap in integrating B'laan economic practices and cultural knowledge into the ALS curriculum for IPEd. There is a lack of literature including B'laan food preservation and economic practices in educational interventions. This study aims to make concrete recommendations that could be helpful in heightening the culture relevance and effectiveness of educational interventions by considering women's roles in the economy as well as curricular content.

Contextualized Education. Episcopal Commission on Indigenous Peoples concluded that IPs' schools should use appropriate learning aids, calendars of activities that may fit to the education calendar of indigenous people, and buildings or schools that are culture-sensitive and based on the indigenous architecture. This is one of the mechanisms to contextualize education.

Corollary to this, the Department of Education (2016) has imposed an Indigenous Peoples Education Curriculum Framework (DepEd Order No. 32, s. 2015) which gives direction in contextualizing the K to 12 Curriculum for IPs. With this, 1.19 million indigenous learners throughout the country will benefit from this program in all funded schools.

The use of mother-tongue in the classroom contextualizes the education. The learners will set up their own character and understand their own selves. Mother tongue adds certainty, perception, and social personality to the learners. Using smother tongue in schools will lead to equal opportunities for Batangan et. al, (2007) mentioned in his book entitled "The Road to Empowerment: Strengthening the Indigenous Peoples Right Act", the core learning competencies and the indigenous culture shall marry to obtain balance to learners. Para-teachers should employ in the indigenous schools. They know in-depth the culture, traditions, songs, practices of the indigenous community. Calendar days of the school year should be followed based on the activities evident in the indigenous community.

It is still scant on empirical evidence specifically in the implementations and integration of these strategies especially where indigenous languages are gradually diminishing. It also does not account for the effects of para-teachers with indigenous cultural knowledge on student outcomes, including engagement and learning. These literatures were aimed at filling these gaps to promote educational programs for indigenous groups.

Human Security-Based Education. There are projects granted by the government to establish education for IPs in Mindanao, particularly in Surigao del Sur. One of which is the Alternative Learning Center for Agriculture and Livelihood Development (ALCADEV). Students are taught indigenous knowledge, appropriate technology, and sustainable agriculture. However, the IPs are harassed by military units and the learning centers are alleged as the training grounds for the indigenous students to become New People's Army (NPA) fighters. With this, human emotional- security is apparent in the face of indigenous students (Beyer, 2015).

According to International Fund for Agricultural Development (2003) that conflict is geographically related to the inhabited areas of IPs in Guatemala. Equality is imposed in such manner; indigenous women are given a chance to become a peace broker and promotes multi-stakeholder participation. This is in contrast with the statement from Education International entitled "Peace Education" that school must be a zone of peace and secured from any human violence to maintain and facilitate an atmosphere where students (B'laan learners) can learn, and teachers can do their job safely. However, discrimination in school is one of the traumatic experiences of indigenous students. Teachers treat indigenous students differently. School discriminates the indigenous students by requiring wearing uniforms and shoes even if, they are not used to. Buying of those school requirements are in contrast to their financial capacity being indigenous one. Indigenous children evaluated as slow learners because they have difficulty in understanding the mainstream curriculum (Episcopal Commission on Indigenous Peoples).

Despite highlighting issues such as harassment and emotional insecurity, there is a lack of research on how these factors affect learning outcomes and student well-being. Additionally, the effectiveness of current educational programs in fostering a safe and inclusive environment for indigenous learners remains underexplored. This research therefore seeks to address these gaps to better understand the challenges faced by indigenous students.

Right-Based Education. To safeguard themselves from discrimination and rights abuses, basic human rights must be instituted for the B'laan tribe. According to Beyer (2015), IPs, especially in the ASEAN region, have long been discriminated against and relegated to second-class citizenship. Of course, these are the rights to life, liberty, and security, but according to the Philippine Commission on Human Rights (2006), the country is still grappling with these issues because armed conflict remains a real and serious threat, and so there is a need to inject human rights issues in the curriculum.

Lutz (2016) identified the following rights for which IPs seek: the right to be recognized as distinct groups with unique cultures; the right to respect their ability to determine for themselves their own destiny; the right to enjoy the same rights as all other people without any discrimination; the right to be included in decision-making process; the right to own, occupy, and use their ancestral lands, territories and resources; and the right to be left alone away from any conflicts.

In fact, the law enumerates the rights of IPs over their ancestral domains/lands. These are the “right of ownership over the ancestral lands/ domain, right to develop and manage lands and natural resources, right to stay in territories and not to be displaced therefrom, right to regulate entry of migrants and other entities, right to safe and clean water, right to claim parts of reservations, and right to resolve conflicts according to customary law (Sections 1–8, Rule III, Part II).

IPs also have the right to transfer (ancestral) land or property among members of their community, and to redeem those that have been acquired from them through fraudulent transactions (Sections 1, 2, Part III) (Asia Development Bank, 2002).

Violation of human rights among IPs was apparent. The on-going arm conflicts in the country yields into displaced IPs; some were killed or detained, while some were tortured because they were convicted as members of

rebel groups. Another violation is the ownership of the ancestral domain (Ty, 2010).

The discussion of many rights issues is complete, but there is a lack of discussion of how armed conflict and land exploitation uniquely affect the academic outcomes of B'laan students. The capacity of these learners to be empowered through the inclusion of human rights education in different parts of the curriculum has also not been investigated. This raises the need for further studies on the B'laan community's education from an HR-based standpoint.

Voice-Based Education. King (2000) mentioned that for indigenous groups, decisions about community matters are set by the headman or datu [Fulong], with or without consultation with the people in the community. In addition, B'laan tribe's datu (Fulong) was chosen by the people in the community. But this is contrary to what is happening today; a Datu or Fulong is being appointed by the state to have access to extractive projects [land mining] to be implemented in ancestral domains. This cunning strategy by the state brings about conflict because in tribal community where social organization is strong and cohesive, the appointed Datu or Fulong will be rejected.

Moreover, Hlawning (2006), described the political indigenous system as participatory, inclusive, and consensus decision making. All elders and mature community members need to attend the meeting for policy making in the community. In other words, comprehensive consultation is necessary to maintain order and harmony in the community.

On the other hand, for B'laan, violations such as murder, theft, and adultery are considered as major offenses while an act of lasciviousness committed against a girl, or a woman is considered as minor offense. The punishment imposed depends on the nature of the offense and the demands of the offended party. Adultery is punishable with a fine, which if not paid; the man and woman who have committed adultery are tied together with a rock, and then dropped into the sea. If the penalty consists of payment

and the Fulong used Kasfala (the process of conflict resolution) and assumes this obligation on behalf of the offender, the offender must work in the service of the Fulong until such time that he decides that he has served long enough to pay his debt.

There are different views on the matter of state-appointed leaders and the traditional governance of the B'laan tribe. It observes a variety of conflicts between the datu who were elected by the community and those who were appointed; however, it lacks in-depth investigation into the effect of these appointments on the decision-making process, cohesion of the communities and traditional conflict resolution practices such as Kasfala. External sources and indirect influences on traditional leadership and governance still need to be subjected to further exploration.

Culture-Based Education. Bong Banwu is a large community of B'laan tribe. It is a community consisting of B'laan cultures and traditions such as clearing (alnigo), hunting ground(gumlok), mountains(bolo), rivers(e-el), ritual sites and other human features such a burial ground. One village is for one's family. The name of the family's more aged male was often used to refer to the village and the area that surrounds it (Caresma, 2011).

Abayao (2014) in her article entitled "The Philippine Indigenous Peoples' Core Curriculum". According to her, that Department of Education basic formal education and non-formal education curricula do not answer to the specific needs of IPs. IPs are excluded in enhancing curriculum to fit their educational needs. She added that the use of English and Tagalog as medium of instruction in the classroom is continuously done rather than the use of IP dialects. Lastly, schools run by other organizations or Non-Government Organizations with IP curriculum are not recognized by the Department of Education.

According to Pastor Roger Gillava, a B'laan tribal leader in GKK Village, Brgy Pag-asa, Mlang Cotabato, close family ties have always been recognized as one of the core values of

B'laan families. They are deeply embedded in their culture. The life of the B'laan revolves around their family that usually lives within one compound. It consists of more than one spouse and extended relatives that are living together (Dela Cruz, 2014).

The B'laan practices the giving of bride price (sunggod). The bride's family, especially the father and close relatives, demand valuable things and animals such as agong, carabao, horse from the groom's family. The wedding is officiated by a tribal chieftain (Fulong or Datu) with the presence of the elders in the community. The celebration usually lasts for four (4) days. The people in the community enjoy the safkain, a party prepared by the groom's family to the bride's family. A welcome party (muliagno) is also being held by the groom for his wife. For them, having many wives is a symbol of power and influence. To be Bong Fulong's wife symbolizes prestige and high status (Sphynxbabez, 2009).

The research gap in this text is the failure to conduct research on the formal educational system as one of the institutional factors that falls short in meeting the educational and cultural needs of B'laan people in Bon Banwu. Although it addresses the problems such as the lack of culturally appropriate materials and instruction in indigenous languages, it fails to delve further on the possible consequences of these factors to educational attainment as well as cultural heritage. Moreover, the role of elders from the community in the design of educational systems has not been addressed further. There is an exhaustive need for more studies to incorporate the culture of the B'laan community into education.

Indigenous Knowledge-Based Education. The Indigenous Knowledge, Skills, and Practices (IKSP) is cohesive to IPs as their core culture and identify them among others. In Africa, on the other hand, the inclusion of indigenous knowledge in the curriculum is a must. The appreciation of IKSP is the root of therapeutic import (Emeagwali, 2003). World Bank (1997) stated that indigenous knowledge is the basic

component of any nation's knowledge system. This indigenous knowledge comprises of skills, insights of people, and experiences that could improve their way of living. In fact, in the country, indigenous students are taught indigenous knowledge, sustainable agriculture, and appropriate technology in indigenous schools (Beyer, 2015).

Episcopal Commission on Indigenous Peoples described that indigenous knowledge is referred today as superstitious belief. Everybody is a source of knowledge accompanied by the learning process. Ancestral domain or creation and dreams are considered as the source of indigenous knowledge. In dreams, IPs learned weaving designs, making traditional medicine and other knowledge.

However, the community members B'laan tribe in the hinterlands of Alabel, Sarangani Province admitted that their collective knowledge on disaster management and environmental conservation is gradually vanishing due to the influence of modern technology and mass media. The present generations of B'laan are no longer aware of these knowledge assets of their tribe. In addition, most B'laan farmers are no longer using indigenous pesticides like *salvan*, *abtok* and *sol* as they are using chemical-based pesticides for their agricultural crops (Espesor, 2013).

Currently, in the advent of drought as an aftermath of climate change in our country, indigenous knowledge on how to mitigate it and store food is necessary to sustain life. Eating *klot* (poisonous wild yam) is just an ordinary activity to stave off hunger. The B'laan are aware of the toxic or poisonous component of *klot*, but they are skillfull in making it edible.

The Fulongad malol (traditional midwife) assists the B'laan woman in giving birth. Before delivery, the pregnant woman sits in closed young banana or cogon leaves for easy delivery. The umbilical cord is cut using sharpened bamboo (*bagakay* or *pawa*). The child can only be named after cutting the umbilical cord. The mother takes a bath after giving birth. She takes

herbal medicine such as boiled roots of different herbal plants to avoid strain (Sphynxbabez, 2009).

The mourning usually lasts for one day. If the person who died is a renowned person in the community, the mourning may last for a month or more. According to Eclatan, however, it lasts 3-5 months. During this period, no chicken shall be butchered, no members of the deceased shall be reprimanded for whatsoever reason, and the close people or persons shall not change their clothes. In some cases, the dead are buried in the ground. Four people carry their bodies to the grave site. Some guard the path and the grave site against the *samkotmati* (BLAAN.NET, 2016).

Collective wisdom and practices should be included in the curriculum and carried on by younger generations particularly the environmental conservation (Espesor, 2013). However, the immense indigenous knowledge systems and practices of the B'laan communities are gradually eroding since the younger generations are no longer interested to learn the collective wisdom on environmental conservation of their tribe (Elbat, 2012).

It is apparent that there is no explicit discussion of the cultural identity of B'laan tribe and environmental sustainability in relation to disintegration of Indigenous Knowledge, Skills and Practices (IKSP) is the gap in this text. Although it mentions loss of traditional knowledge supportive of the community because of new trends, it fails to address the issues of community resilience or innovative approaches to IKSP in education. There is a gap with respect to the linking of the indigenous way with the present situation as it relates to climate change.

Eco-Based Education. The United Nations Educational, Scientific, and Cultural Organization (UNESCO, 2010) reported that IPs identify, and classify soils, climate, plant, and animal species and its special characteristics. Basically, plants provide food, medicines, pesticide, poisons, and building materials; while animals provide meat, clothes, strings,

implements, and oil. Moreover, as regards environmental protection and the protection of ancestral domains, many studies found out that for the IPs, land [ecosystem] is life which means more than a mere source of livelihood. Land [ecosystem] defines their very existence and their identity. For the IPs in the Philippines, their ancestral domains were created by Manama or Magbabaya or D'wata. Hence, it is sacred. Being sacred, it must be preserved and protected (Gaspar, 2000; Tauli-Corpuz, 2008).

According to the Episcopal Commission on Indigenous Peoples, the ancestral domain of IPs serves as their learning area, their avenue for gathering, interaction with the elders, and learning about the culture, practices and dynamics within the community (as cited in Fiagoy, 2005; Alanguí, 1997).

The B'laan has considerably poor environmental capital since trees in the forest were toppled down by massive logging activities and only a few remaining trees patch in the area. Some tributaries of the watershed are already dry and no water flows except during heavy rain (Espesor, 2013).

However, the B'laan focuses on the collective ownership of the forest and all the natural resources found therein. They also believe in the sacredness of some animals and plants. Thus, they have a profound obligation to protect these plants and animals. This belief is significantly contributing to the promotion of biodiversity (Elbat, 2012).

Marouli (2002) believed that cultural lenses and theories should be understood to culture the environment. This further explains that understanding, exploring, and valuing the cultural parameters of the environment such as environmental problems, and solutions should be prioritized.

The practical consideration that has been identified relates to the inadequacy of empirical studies that link the environmental and biodiversity practices of the B'laan tribe to the cultural belief of environmental stewardship of the B'laan tribe's people. Axioms about

ancestral domains and indigenous knowledge are underlined, but there is inadequate assessment of sustainability strategies that these culturally rooted beliefs can clearly tackle. In addition, integrating B'laan practices into larger conservation practices in the context of continuing environmental degradation to be investigated.

Sustainable Education. The term “education for a sustainable future” implies a vision both of a sustainable future and of a process to make it a reality. To envision a sustainable future, we must identify the interrelationships of present trends in equity, economics and environment, and plan the processes and actions to bring about change. A sustainable future implies a sustainable environment capable of maintaining the diversity of life; a sustainable economy based on wise and equitable use of resources, and a sustaining society whose lifestyle, aspirations and values are in harmony with the natural environment. (p. 107) UNESCO (2010) emphasizes that sustainability is essential for meeting the needs of Indigenous peoples (IPs) without compromising environmental resources. IPs utilize their deep knowledge of ecosystems to coexist with nature rather than exploit it, viewing land as integral to their identity and culture (Wetzlmaier, 2012). Therefore, environmental protection is vital for the livelihood, cultural identity, and development of Indigenous communities.

Kakabadse (1998) writes as cited in Marouli (2002), that sustainable future in the context of environmental education is an interlink of present development in equity, economics, and environment towards changes. A sustainable future brings a sustainable environment that could cater for the diversity of life. Fair use of resources is a form of a sustainable economy. And lifestyle, dreams, and values in accordance with the natural environment are a form of sustaining society.

To sum up, the identified factors for educational development address the needs, dreams, and aspirations of IPs particularly the B'laan tribe. Free education, community resource-based education, contextualized education, human

security-based education, right-based education, voice-based education, culture-based education, indigenous knowledge-based education, eco-based education and sustainable education significantly contribute to the kind of education aspired by the B'laan tribe. The existing research gap is encouraging holistic, sustainable education that applies local practices of the B'laan tribe. Although sustainability and indigenous issues are well covered in literature, there is little engagement on what practical educational models allow the two — environment and culture — to be enhanced at the same time. More studies are needed to create and test such educational strategies.

In reference to the aforementioned literatures, the following research questions were addressed in this study:

1. What themes describe the current learning and experiences of the B'laan tribe?
2. Based on these themes, what factors supporting Human Capital Development for the B'laan tribe emerged from the exploratory factor analysis?
3. What framework of human capital development is proposed for B'laan tribe?
4. What factors contribute to the effectiveness of the human capital development framework for the B'laan tribe, as indicated by the model fit and analysis results?

METHODS

The research study utilized an Exploratory Sequential Mixed Methods research design that integrated qualitative and quantitative data types of problems into the problem statements as presented by Creswell (2014). Important points were considered while collecting the data so as not to be careless with both sampling processes and the analysis techniques since the two data types are merged, linked, or embedded. The researcher used observational methods combined with phenomenology for the qualitative type, and the fieldwork and

immersion techniques are used to close-up examine the B'laan tribe and the phenomena in study.

Focus group discussions and key informant interviews were conducted with specific members of the B'laan community, such as tribal leaders, barangay representatives, teachers, and NGO members. The qualitative part of the study is grounded on first-hand data coming from direct interviews, observations, and informal discussion during field visits and community activities. The target participants include parents, tribal leaders, barangay officials, farmers, and other influential community members associated with government and NGO schools.

In quantitative research, the researcher made use of Exploratory Factorial Analysis (EFA), and Confirmatory Factor Analysis (CFA). Exploratory Factorial Analysis is a way of simplifying multivariate data by grouping together observed measures that have strong relationships (Curada, 2010). Confirmatory Factor Analysis using Structural Equation Modeling (SEM) is being used in the study. It describes that a dependent variable in one regression equation may appear as independent in another equation.

Using a purposive sampling method, the researcher, with the help of the B'laan tribal leader (Fulong) was able to gather fifty (50) B'laan people in Datalfatac, Solonsabac, Matanao Davao Del Sur on October 20 – 24, 2015. Some of these participants were the parents, B'laan tribal leader, Barangay kagawad, farmers, and ordinary B'laan people who are stakeholders of the government, and the Non-Government Organization (NGO) schools present in the community. In other words, according to Fraenkel, J. & Wallen, N. (2007), in purposive sampling, the researcher used judgment to select a sample that he believed, based on prior information, would provide the data he needed.

With the sample size provided, the data collected in qualitative approach correlated to

the quantitative approach to connect the data gathered in this mixed method approach.

Table 1
Sample by Location/Area

Location/Area	Sample
Colonsabac	50
Kimlawis	50
Bongmal	50
Bolo-Salao	50
Caburan Small	100
Total	300

Upon reading the literature, it was found that a qualitative-quantitative design or mixed-method research design would best work in the study. The researcher identified B'laan communities in Davao del Sur (Datalfetak, Colonsabac, Kimlawis, Bongmal and Bolo-Salao) and Davao Occidental (Caburan small, Jose Abad Santos) that were of potential value to the study and conducted initial visits to these communities to establish rapport with the local leaders.

In analyzing the collected qualitative data, the main qualitative strategies, such as on-site immersion and observation as well as Focus Group Discussions (FGDs), Key Informants' Interviews, Casual Conversation and Sharing with the participants and the local people employed by the researcher, were analyzed from the different vantage points through the help of some experts.

Conceptual Framework. Using interpretive phenomenological analysis, the responses of the participants were studied. In that case, the accounts of the participants were familiarized with, and a matrix constructed. The methodology included making flow charts, diagrams, and matrices to illustrate responses and factors at play so that comparison and hypothesis generation can be easier. Key issues were allowed to tackle several research objectives with the outcome signifying the interconnectedness of the study's aims.

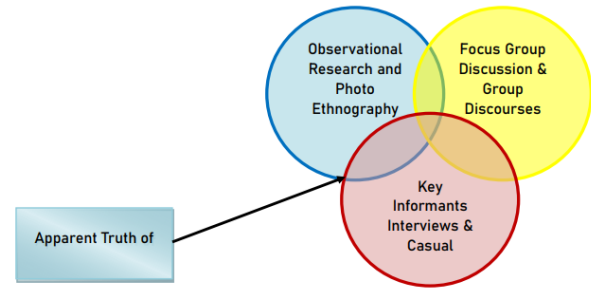


Figure 1
Illustration of Interpretive Phenomenological Analysis (IPA) as conceptual approach

The research tries to design the framework that best suits the Human Capital Development needs of B'laan, using Confirmatory Factor Analysis-Latent Curve to solve problem three and Exploratory Factor Analysis (EFA) for solving problem two, as it identifies what major factors are involved in this case regarding education, according to Curada (2010). Hence, EFA classified the statements through commonalities, establishing which factors impact human capital development in this case.

RESULTS

To understand how to learn from and about aspirations of education in the B'laan tribe first by exposing the experiences and conditions of their learning experience. The FGDs and KIIIs revealed five major themes that shine light on those experiences, which basically address the need to clarify the research question as well as emphasizes that there is a qualitative study.

There were 2 themes extracted from the participants' responses under the dimension of economic education. The first theme that emerged was on the issue of education is not totally free. The result of the focus group discussion is consistent with the participants' response during the interview conducted, saying that "Education should be totally free for us because we are poor. We even have difficulty in looking for our food and if we still must pay for the education of our children, we will be forced to tell our children to stop schooling and help us on the farm instead". The second theme centered on the issue of experiential education which yields to realistic application. One of the participants' ideas during the interview was

supported by the result from focus group discussion, saying “It’s good sometimes that the discussions are inside the classroom, but we suggest that the teachers should also expose student outside the classroom and use examples which are present in our community.”

In addition, there were also 2 themes extracted from the participants’ responses under the dimension of social education. curriculum which is not culture-sensitive and peace and security education for B’laan tribe. It is clearly stated by participants during the interview and similar result from focus group discussion that “It is good that preservation of our ancestral domains and how to take good care of our lands should be included in the discussion of the teacher in the classroom.”

Results of Key Informant Interviews and Focus Group Discussions reveal some concerns over militarization, specifically, for the safety of the children and for schooling: Sometime, sometimes the students do not attend classes because there are fears that perhaps armed conflict will occur during those times. The debate of whether to enroll children in school or not arises from Department of Education-owned schools versus NGO-run schools due to suspicion that the former is linked with the NPA, and which is which confuses the children. This diverges sharply from the principles outlined in "Peace Education," where it is emphasized that schools must be non-violence zones to allow proper learning.

Qualitative analysis revealed two themes in the dimension of political education. The first theme was human right-based education for B’laan tribe. The participants pointed out “Our children should learn from the school about their rights as B’laan and how to fight for their rights.” The second theme extracted from the result of the FGD, and participant’s responses was the voice-based education for B’laan tribe. The need to include the political system awareness for B’laan tribe is necessary, as stated, “We would like that our children will learn not only how to preserve our lands and how to make medicine but also about political maturity.”

Two themes emerged from this qualitative analysis - overall, it made an argument that the curriculum for the B’laan must be more culture-sensitive, as it was pointed out during the survey that the Department of Education does not have this kind of curriculum, but an NGO-run preschool has some aspects of culturally relevant education. The second theme pointed out the influence of native knowledge, skills, and practice, as participants claimed much education about their traditional agriculture and medicine is needed, as these subjects are important in the participant's community.

Qualitative analysis revealed two themes in the dimension of environmental education. The first theme pulled out from the participant’s responses was eco-based education for B’laan tribe. The participants revealed that “B’laan means on how to plant, protect trees, animals in the forest, preserve water resources, and traditional way of hunting must be sustained and included in the lesson. Forest is our home” The second theme hauled out from the result of the FGD, and participant’s responses was the sustainable education for B’laan tribe. The call for the inclusion of sustainable education is vital; as stated, “There must be a curriculum that is suited to a B’laan’s needs and aspirations such as inclusion of traditional knowledge, means of participation, means of cultivating lands, and means of preparing medicines from the environment”.

Education for the B’laan cannot be separated from their cultural, political, economic and even social aspects. FGD and KII results revealed that some of the traditional cultural practices of the B’laan are still observable in their communities. However, in their daily experiences with the schools that are run by the Department of Education (DepEd) FGD and KII results revealed that the current learning experiences and conditions of the B’laan can be clustered into the following themes: education is not totally free, experiential education which yields to realistic applications, curriculum which is not culture sensitive, peace and security education, human rights education, voice-based education, culture-based education, indigenous knowledge, skills, and

practice-based education, eco-based education, and sustainable education.

The researcher conducted Exploratory Factor Analysis (EFA) to validate the results from the qualitative analysis incorporating indicators that would best fit the observed factors of every latent factor constructed after which a confirmatory factor analysis shall subsequently be utilized to generate the best model for human capital development framework for B'laan tribe in the context of education. Based on the emerging themes, test items were created to test the themes elicited from the study.

Using exploratory factor analysis, there were ten (10) factors hauled out for human capital development framework for B'laan tribe in the context of education. These factors were free education, and community resource-based education in the context of economic education; contextualize-based education, and human security-based education in the scaffold of social education; right-based education, and voice-based education in the structure of political education; culture-based education, and indigenous knowledge-based education for cultural education; and eco-based education, and sustainable education in the frame of environmental education.

Table 2
Factors emerging from the Exploratory Factor Analysis (EFA)

Factors	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.166	9.392	9.392	4.303	7.824	7.824
2	3.788	6.887	16.279	3.588	6.523	14.347
3	2.446	4.447	20.726	2.235	4.064	18.411
4	2.249	4.089	24.815	2.173	3.952	22.362
5	2.041	3.711	28.526	2.151	3.912	26.274
6	2.026	3.684	32.211	2.126	3.865	30.138
7	1.753	3.188	35.398	2.070	3.763	33.902
8	1.701	3.093	38.491	2.057	3.741	37.643
9	1.690	3.074	41.565	1.958	3.560	41.202
10	1.576	2.866	44.430	1.775	3.228	44.430

The aim of factor analysis is to reduce the measurable and observable variables into fewer latent variables which share similar variances and are unobservable. These

unobservable factors are not directly measured but are basically hypothetical constructs that are used to characterize variables (Yong & Pearce, 2013). In this study, the goal of the researcher was to look for attributes associated with a factor through defined factor scores which can be used in multiple regressions to establish causality. Confirmatory factor analysis was used to confirm hypotheses and utilize path analysis diagrams to characterize variables and factors (Yong & Pearce, 2013).

Also, the result of the analysis on the human capital development framework among B'laan tribe showed that Chi-square 1.171 (p-value 0.265) and all fit indicators were not less than the threshold, NFI of 0.979, CFI of 0.986, TLI of 0.970 and RMSEA of 0.024 indicated that framework 5 was met, hence, model fit requirement was then selected as the best model. The next data analysis by using confirmatory latent curve analysis in two-construct level considering there were two constructs in human capital development framework resulted to Chi-square value of 0.021 (p-value 0.885) and all the fit indices were perfectly fit (NFI and CFI value was 1.000). Both factors, i.e., social education with human security-based education; as well as contextualized-based education with eco-based education and sustainable education had the same meaning, it does not mean that both are only dimension/facet of B'laan people's educational goals. Table 3 shows the factor loading the items under each dimension.

Table 3
Factor loading items under each dimension

Number of items	Factor loading range	Factor
5	.934-.962	Free Education
17	0.235-0.735	Community Based Resource
53	0.274-0.585	Contextualized Based Education
43	0.311-0.623	Human Security Based
52	0.289-0.601	Right-Based Education
55	0.345-0.508	Voice-Based Education
50	0.512-0.815	Culture-Based Education
41	0.243-0.692	Indigenous Knowledge-Based Education
45	0.216-0.696	Eco-Based Education
54	0.324-0.461	Sustainable Education

It was proven in the human capital development framework of the B'laan tribe that the model provided a good fit with the data that signifies it represents the educational factors correctly, and thus further affirmation of its stated fit expressed the reliability of the framework towards understanding the development of human capital in the community.

Furthermore, based on the results, human capital development framework for B'laan tribe in the context of education can be further examined by free education, community resource-based education, contextualized education, human security-based education, right-based education, voice-based education, culture-based education, indigenous knowledge-based education, eco-based education, and sustainable education. These observed dimensions under their respective latent dimensions would be a necessary requirement for confirmatory factor analysis.

The study developed a human capital development framework for the B'laan tribe, focusing on education and employing structural equation modeling with AMOS to analyze the interactions between latent and observed variables. A working model was created to illustrate the relationships among five latent factors: economic, social, political, cultural, and environmental education. Corresponding observed factors include various educational approaches such as free education, community resource-based education, and indigenous knowledge-based education, all aimed at enhancing human capital development for the B'laan tribe.

DISCUSSION

The study results clearly articulate the experiences and aspirations regarding education within the B'laan tribe and addresses the identified problem statements. Under the dimension of economic education, two important themes emerged. The first was that education is not entirely free, highlighting financial burdens that many families bear and forcing children to drop out of school to help supplement the family income. They also

focused on experiential education, a curriculum that extends beyond the classroom setting to include practical and community-relevant experiences.

Social education issues in the curriculum were reported as a major problem, wherein B'laan cultural heritage, particularly on matters of land preservation, was emphasized. They also presented issues on education concerning peace and security, stating that militarization in their area negatively impacts school attendance, hence the need for safe schooling. The themes of political education included the call for human rights-based education where children learn their rights and how to articulate them, and voice-based education which creates awareness of politics and participation.

Cultural education highlighted the demand for a curriculum that 'relativizes' the applicability of B'laan traditions and indigenous knowledge against generic approaches, especially in agriculture and traditional medicine as assumed. Environmental education is dominated by two themes; first, eco-based education—a stewardship of local ecosystems—and second, sustainable education calls for traditional ecological knowledge's incorporation into educational frameworks.

Proposed Human Capital Development Framework. Ten factors were identified that cut across all the five dimensions: economic, social, political, cultural, and environmental education. This establishes that confirmatory factor analysis model posits a good fit of the framework as it had very good fit indices. In all cases, this framework includes free education, and community resource-based education under economic education; contextualized and human security-based education in social education; rights-based and voice-based education in political education; culture-based and indigenous knowledge-based education for cultural education; and eco-based and sustainable education within environmental education.

Thus, the findings do point out that the educational wants of the B'laan tribe are

intertwined and interlocked with their cultures, economy, and political contexts. The themes have been thus identified and framed, therefore, providing the structured steps to improve the human development capital that adheres to the values of the community and meets their needs—the very essence of an education being provided in a cultural context.

In the light of the results and findings of this study, the following recommendations are offered to development workers from the government and the private institutions who want to implement development programs and projects specifically for the B'laan tribe: DepEd Policy on Education; Guidelines from the Provincial Government; Policy on the Selection of NCIP Directors/Heads; and, Future Directions.

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