
A sociocultural perspective of learning: Developing a new theoretical tenet

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Abstract

Explanation pertaining to individuals' cognitive development and learning approaches is a recurring theme in the areas of education and psychology. The work of Okagaki (e.g., Okagaki, 2001; Okagaki & Frensch, 1998), for example, has provided both theoretical and empirical insights into the structuring and situational positioning of individuals within a community (e.g., the school, the family). Theoretical tenets emphasised by Uri Bronfenbrenner (1979, 1989) and Lev Vygotsky (1978), in particular, form a basis that enables us to understand how individuals acquire their knowledge from societies. Notably, differing from other theories of cognition, the emphasis here entails the social construction of knowledge and how we fit in within the different layers or systems of societies (e.g., the community). Our work within the last couple of years (Phan, 2009a, In press-2013) has entailed a similar approach, emphasizing the social process of cognition within different contexts – for example, a child interacting with his/her peers at a local preschool, or a child conversing with his/her siblings at home. The empirical evidence we obtained (Phan, 2007, 2008b) has led to a conceptualisation that supports previous theoretical tenets (Bronfenbrenner, 1979, 1989; Vygotsky, 1978). The scope of this article espouses a theoretical model that depicts an overall arching system of change. In particular, similar to previous tenets and studies (e.g., Okagaki, 2001; Vygotsky, 1978; Wertsch & Tulviste, 1992), we posit that a person's cognition may situate within three separate layers: (i) individuals' sociocultural and historical origin, (ii) the community, in general, and (iii) individualised learning and achievement obtained by the individual. Our conceptualisation, for continuing discussion and research discussion, details the intricacy of distinctive layers that individuals may transverse between. Pivotal to our discussion is the quest for us to explore the multi-layered system of cognition from an individual's perspective. Rather than accentuating the potency of what a community entails, our examination discusses the individual's perceptions of learning in the various layers of society. In this analysis, how does an individual's historical genesis shape his/her understanding and perceptions of meanings such as 'learning', 'knowledge', and 'skills'? Similarly, how does an individual fit in with a family that adheres to the beliefs pertaining to collectivism (Markus & Kitayama, 1991) and filial piety (Chow & Chu, 2007)?

Introduction

Recent educational research has shown that different cultural and social layers combine in a hierarchical system to shape individuals' cognitive and motivational processes of learning. This theoretical premise arises, in part, from multilevel analyses of data where evidence highlights, specifically, the importance of a person-context relation in the learning process (e.g., Marsh, Martin, & Cheng, 2008; Urdan, 2004; Walker, Pressick-Kilborn, Arnold, & Sainsbury, 2004). Notably, the significance of this research inquiry suggests that our thinking processes, motivation and, ultimately, and development of skills per se do not exist in isolation, but rather embed in multi and systematic layers, consisting of the social milieu, the immediate family, and the individual himself/herself. This documentation is not contemporary, but rather an expansion of previous bioecological and sociocultural theories (Bronfenbrenner, 1989; Lave & Wenger, 1991; Vygotsky, 1978; Wertsch, 1985). Acknowledging the individual and his/her societies has implications for research development and applied teaching practice, especially in the structuring, design, and implementation of instructional policies at the community, school, and classroom levels.

The focus of this theoretical article then, attempts to elucidate the ways in which external forces, in this case, the environment and the family, shape individuals' learning in achievement contexts. Our discussion involves an in-depth examination of the empirical literature pertaining to the positioning of individuals in their societies, and how sociocultural attributes such as epistemological beliefs and cultural values contribute to learning and achievement outcomes. With reference to the works of Bronfenbrenner (1989), Okagaki (2001), Vygotsky (1978) and others, we present a cohesive hierarchical model for research development, describing in particular three dialectically-related mechanisms that influence individuals' learning: the community and its social, economical, and cultural attributes; the immediate family; and the individual's cognitive-motivational processes involved in learning. We conclude the discussion by drawing in a few major issues for consideration and research development.

Society, values, and beliefs

Individuals' cognition and motivation, according to some researchers, originate in contexts and, consequently, relate closely to the external world (Phan, Maebuta, & Dorovolomo, 2010; Walker, et al., 2004). This theoretical postulation reflects existing tenets, notably Bandura's (1986, 1997) social cognitive theory, Bronfenbrenner's (1979, 1989) ecological systems theory, and Vygotsky's (1978, 1981) sociocultural theory of development. Despite their distinctive characteristics, the mentioned orientations concur a commonality, suggesting that individuals' development *per se* is not an isolated entity, but rather confined to an overarching sociocultural system. The central thesis here, in accordance with Bandura's (1986, 1997), Bronfenbrenner's (1979, 1989), and Vygotsky's (1978, 1981) theories, contends that extraneous social factors (e.g., cultural values) combine with internal cognitive-motivational processes to account and explain individuals' learning and achievement outcome in educational and non-educational settings. Considering this theorization, the premise of our article contemplates three interactive processes that may take precedence to influence individuals' development and learning: (i) the community and its social influence; (ii) the immediate family and its expectations; and (iii) the individual and his/her cultural beliefs and values. Other researchers (Nelson, McInerney, & Craven, 2005a, 2005b; Okagaki, 2001; Okagaki & Sternberg, 1993) have also conferred, similarly, that individuals continuously interact with their social milieus to master and acquire new skills.

The aforementioned theories' (e.g., Bioecological theory: Bronfenbrenner, 1979, 1989) rationalization interprets knowledge acquired by individuals as a derivative of their environments. In details, central to Bandura's (1986, 1997) social cognitive theory is the emphasis on a bidirectional framework, known as reciprocal determinism that describes the interrelations between the environment, and individuals' behavior and his/her cognition. His works on observational learning and subsequent seminal publication on personal self-efficacy during the late 1970s (Bandura, 1977) exemplified a reciprocal interaction between a person's environment and his/her behavior or cognitive thought. For example, in the context of elementary school learning, a child's aggressive behavior (e.g., bullying another child) may cause others in his/her class to act hostile with negative feelings; in turn, this hostility reciprocates and influences the child (e.g., isolation). In a similar manner, a child's positive self-belief about his/her capability to solve a set of mathematics problems will influence his/her decision to take some extra lessons in mathematics; this additional participation, in turn, is likely to make a positive impression on his/her teacher. This bidirectional interaction has relevance and indicates that external forces contribute to the shaping of a person's cognition and/or behavior.

Bronfenbrenner's (1979, 1989) bioecological systems theory differs relatively, and emphasizes individuals' situational placement within four distinct sociocultural layers. Individuals in this case develop within a complex system of relationships and contexts between the microsystem (i.e., person-others interaction), mesosystem (i.e., connections between situations), exosystem (i.e., indirect influence on a person from others' relations), and macrosystem (i.e., relation with society at

large and one's own cultural identity) layers (Hoffnung, et al., 2010). In this analysis, the bioecological systems framework suggests that individuals, in part, learn and acquire knowledge from their social surroundings. Individuals do not exist in isolation vacuum, but rather interact and transgress between contexts, events, and situations. A child's learning and understanding of a key concept (e.g., why rainbows exist), for example, are embedded in his/her interactions with others in a local preschool. Another child hearing bedtime folklore stories about rainbows from his/her mother may impart this information onto others, facilitating then a process of sharing, negotiation, and the passing on of knowledge. In a similar vein, apart from the immediate surrounding, it is also likely that a child's interaction with the wider community may shape his/her personal beliefs and understanding about the world. A group of individuals in a remote area with a specific set of ideologies and policies may, for example, believe that knowledge is resolute and not amenable to change (Phan, 2008b, 2010; Phan, et al., 2010).

Bronfenbrenner's (1979, 1989) ideas are, in part, similar to those of Vygotsky's (1978, 1981) where the latter emphasized an interaction between two major processes: the interpsychological process (i.e., person-environment interaction) and the intrapsychological process (i.e., internalization)(Moll, 1994; Sluss & Stremmel, 2004; Valsiner, 1987). This interaction in psychological processes suggests that higher mental functioning is a derivative of one's social origin. Central to Vygotsky's (1978) theorization, knowledge that is constructed socially is internalized or "appropriated" on an individual level. Instructional dialogue arising from social interaction with more competent peers, for example, leads to cognitive development (Burkhalter, 1995; Kinginger, 2002). In a similar vein, social reliance on cultural tools (e.g., culturally accepted behavioral patterns, such as how to eat certain food) and/or semiotic signs (e.g., gestures, symbols, and facial expressions) may also serve to mediate cognitive development (Mahn, 1999; Smagorinsky, 1995; Wilson, 2001).

Vygotsky's sociocultural theory of development suggests psychological tools and semiotic signs that individuals use to mediate development reflect their social origins and cultural identities. One could argue, for example, that sign systems used to structure relationships psychological mechanisms (e.g., how one composes music or how one member touches another) reflect specific and unique cultural values and ethos of a society, community, or a group of individuals. For many indigenous groups and communities, oral and dance presentations, and/or traditional story telling, rather than formal symbolic representations (e.g., textbooks) may take precedence in learning and development. In this sense, informal forms of art and verbal discourse (e.g., traditional singing) define and signify specific cultures and their related attributes (Phan, 2008b). Overall, similar to Bandura's (1986, 1997) and Bronfenbrenner's (1979, 1989) theories, Vygotsky believes that external influences cognitively transform individuals' interpretation, perceptions, and meaning of the external world.

Considering the emphases of existing theories (Bandura, 1997; Bronfenbrenner, 1989; Vygotsky, 1978), we contend there is a dialectic association between individuals and their societies. Development of simplistic skills and complex mental processes (e.g., one's ability to reflect) entails, inherently, a form of social engagement with the social milieu at large. This interpretation places a prominent weighing on cultural ideologies, beliefs and values, and suggests that individuals' situational placements in communities and societies play a major role in the internalization process. In the context of classroom learning, the acquisition of knowledge (e.g., how gravity works) entails exploration and the experience of conflict resolution by means of social dialogues. Other students' thinking, behaviors, and personal beliefs, as well as the availability of resources (e.g., availability of the Internet) may all combine to motivate and enhance one's learning.

Contemporary views emerged recently have also discussed the evolution and development of mental functioning. The work of Okagaki (2001), for example, has been prominent and emphasizes three major characteristics that influence individuals' learning and achievement: the school, the family and the community, and the child himself/herself. These three characteristics, conceptualized as part of a triarchic framework, were originally developed to take into consideration the sociocultural and environmental settings of minority students, and whether these could influence their learning and achievement outcomes. The Okagaki (2001) triarchic framework has relevance for teaching and learning, and this acknowledgement has been validated empirically by a few major research studies

involving students in developing and third world countries (Nelson, et al., 2005a, 2005b; Okagaki & Frensch, 1998). Research interest in this sociocultural context is not unexpected, given the genesis of some cultural groups suggests a strong bonding between three entities: the individual, the family, and the collective community at large. Okagaki's (2001) triarchic framework entails, in general, a systematic intricacy, situating the learning process within different layers of development. Notably, similar to previous theoretical contentions (Bandura, 1997; Bronfenbrenner, 1989; Vygotsky, 1978), Okagaki's (2001) orientation connotes the acquiring of knowledge of skills as being non-individualized.

A triarchic framework: A different theoretical perspective

The thesis of our theoretical positioning extends the Okagaki (2001) framework to include a stipulation of other sociocultural attributes. Our conceptualization, surmising in part from previous tenets (Bandura, 1997; Bronfenbrenner, 1989; Vygotsky, 1978), posits the interrelations between three distinctive entities: the historical and cultural attributes of a society; individuals' families within a local community; and the individual in his/her surroundings. Importantly our premise, similar to the works of Bronfenbrenner (1979, 1989) and Okagaki (2001), posits a hierarchical, structured system that reflects various 'layers' descriptive of society, family, and the individual. An individual who is embedded in a remote community in Papua New Guinea, say, may consequently have different personal beliefs about intimacy and relationships with others. In a similar vein, growing up in urban metropolitan cities may stimulate cognitive growth and foster more competitiveness in learning and achievements. Differentiation in learning and motivation, for example, results from differences in contexts and individuals' disparate upbringings. In essence, contextualization and historical genesis may combine to appropriate individualized development of skills, etc. This section of the article provides a synthesis and review of existing research that delves into facets we believe support our proposition of a hierarchical system of development.

Historical and cultural attributes

There has been an emerging interest recently in the study of cognition and motivation from sociocultural perspectives (Mugler & Landbeck, 1997; Phan, et al., 2010; Walker, et al., 2004). In its simplistic term, this avenue of inquiry entails the notion that knowledge acculturates in contexts. Qualitative examination of students enrolling in teacher education programs in non-Western settings indicates that meanings pertaining to aspects such as 'learning', 'knowledge', and 'skills' relate closely to sociocultural attributes (Mugler & Landbeck, 1997; Tuinamuana, 2007). Borderline on anthropological emphases, there is a conviction amongst some scholars that the 'land' and where one originates transform individuals' personal perceptions and views about qualified knowledge (Authors, 2010; Nabobo-Baba, 2006; Ravuvu, 1988). Grounded specifically, and similar to Vygotsky's (1978) theorization, is the tenet that the social world at large shapes individuals' positioning and understanding of their societies (Berger & Luckmann, 1966; Tuinamuana, 2007). In this analysis, differing social milieus may make contributions to individuals' personal makeups and disparate interpretations of meaning. This avenue of inquiry and continuous questions reflect a paradigm shift in theorization about the purpose of learning and knowledge *per se*.

Ethnographical research investigations have led researchers to a better comprehension of how individuals perceive and approach their learning. Epistemologically, questions are constantly being asked as to how we, as individuals, come to acquire knowledge – for example: "How do I come to know about the world?"; "How does my own cultural upbringing fit in with the learning of this unit material?"; and "How does my cultural identity relate to achievement and academic success?" These questions, in our view, reflect a shift in conceptualization in the construction of knowledge (Phan, 2008a, 2010; Phan, et al., 2010). Unlike scientific testing where empirical evidence may be ascertained, this alternative positioning is more non-scientific and inquires more anthropological insight. In this sense, differing from research investigations that delve into individualized cognitive

processes (e.g., achievement goal orientations: Fenollar, Román, & Cuestas, 2007; Murayama & Elliot, 2009; Senko & Miles, 2008), the focus here involves the study of extraneous social forces and historical-cultural attributes, and how these, in totality, shape a person's epistemological beliefs and cognitive development (Hofer, 2004; Nabobo-Baba, 2006; Phan, et al., 2010; Tuinamuana, 2007). This emphasis accentuates the importance of non-isolationism, wherein we co-exist continuously with other living and non-living matters.

Considering the evidence so far, there is a sense that historical origin within a social milieu may act as a psychological 'artifact' or tool to mediate one's own deliberation and action. An individual who has experienced poverty and who is continuously undergoing financial difficulties may, consequently, have a conviction and set of ideologies and beliefs about the purpose of education. Some individuals may, for example, believe that societies reserve academic qualifications for a selected few. In contrast, for the greater mass of the population with limited opportunities, education may have non-significant values and/or purposes. In a community where there is no foreseeable future, individuals may likely to view the concept of education with a sense of distaste and pessimistic thinking. This negative mindset may escalate when there is a lack of proper physical infrastructures or resources (e.g., availability of computers) in a community. Relating closely to this tenet, a number of researchers have explored the potency of the social milieu and its advantages and negative influences on a person's wellbeing and development. In this analysis, one notable aspect of development and relating to the sociocultural settings is concerned with the formation of a person's sense of identity.

A sense of identity, culturally in its makeup, may contribute to the shaping of a person's cognitive and social development (Phan, 2009b; Seijts, 1998). Questions such as "who am I as a person?" and "where am I heading to in life?" may serve as a premise to guide a person to consider his/her identity. One could say that the question of who we are as people is dependent, in part, on the social context at hand. Technological advanced societies, compared to other places that may reflect some backward modernity, give rise to a strong and coherent identity. Technologies and the abundance of resources readily available assist in the stimulation of economic growth and democratic social values, thereby creating a milieu where individuals tend to feel at ease. Growing up in societies where economic and social vibrancy is an expected norm, individuals may feel more self-efficacious with themselves and/or to affiliate to a set of expectations, values, and achievement-related outcomes; for example, an individual may feel confident to express his/her thinking and desires (e.g., "When I grow up, I want to be like my dad and attend university"). In a similar vein, living in communities and societies where there is positive hope (Snyder, Feldman, Shorey, & Rand, 2002; Snyder, et al., 2000; Snyder & Shorey, 2002), individuals may feel more anticipatory with their current and future events (Seijts, 1998).

One could also posit an alternative view where disadvantaged and impoverished societies galvanize the feelings of discontentment and hopelessness (Phan & Deo, 2007, 2008). Communities and societies in developing and third world countries tend to manifest negativities that relate closely to financial difficulties, social insecurities, and political unrest. Consequently, unfavorable drawbacks may weaken individuals' resolve to contemplate and/or to form positive beliefs about themselves as individuals. In periods of upheaval where there are limited opportunities, individuals may postulate and query their positioning in societies – for example, "is there a place for me to grow and develop?" and "I don't know what is happening; where do I go next in life?" Questions that pertain to the notion of uncertainties may assist also in the forming of identity or lack thereof. Developing and third world places may, in many cases, cultivate more simplistic views of the world and about oneself. Individuals may show more inclination towards identifying themselves with simple personas and/or characteristics, such as "I want to be a farmer and work on the land just like my father" and "Mum is teaching me things so that I know what to do when I get older and have a family of my own."

Our deliberation in the aforementioned sections reflects, similarly, the emphasis on future time orientations (De Volder & Lens, 1982; Mehta, Sundberg, Rohila, & Tyler, 1972; Seijts, 1998; Vázquez & Rapetti, 2006) and how identity (e.g., "who am I as a person?") may associate with a person's cognitive time structures. In this analysis, we contend that sociocultural origins and contexts shape a person's sense of identity and this, in turn, governs his/her anticipations for future

possibilities. Social instability is a deterrence that limits individuals from forming positive identities, giving rise then to consideration for basic short-term objectives and goals in life. Apart from historical and social milieus, there has been research recently that suggested the importance of critical periods in the development of identity (Seijts, 1998; Vázquez & Rapetti, 2006). Does the formation of identity, similar to language development (Collier, 1989; Curtiss, 1977; Flege, Munro, & MacKay, 1995; Newport, 1990; Ormrod, 2008), depend on a critical period in life? There is some empirical evidence to indicate that there may be a critical period, especially during adolescence where one's forming of an identity influences his/her anticipations of current and future events (Phan, 2009b; Vázquez & Rapetti, 2006). This line of evidence entails the notion that critical periods (e.g., the period of 12 – 4 yrs.) may scaffold and provide relevant information for individuals to form their personal experiences, expectations, and goals; ongoing experiences then assist in the forming of positive and negative identities which, in turn, may motivate individuals to engage in learning.

One could also argue that historical origins and cultural attributes contribute to the shaping of a collective identity (e.g., “these people are my family”). A group identity, for example, may entail a sense of affiliation, social rapport, and acceptance for others. Affiliation with others in a social group may assist in the forming and sharing of similar beliefs, goals, expectations, and anticipations of future takings (e.g., “I want to be a firefighter, like John”). In some societies and communities, there is a strong emphasis regarding the notion of interdependency and the social and moral well being of others (Phan, et al., 2010; Ravuvu, 1988; Teaero, 2002). The feelings of belongingness may cognitively transform individuals' beliefs and thinking towards a collective anticipation of an outcome for further development. In this analysis, differing from values that pertain to individualism (Markus & Kitayama, 1991), individuals may in this case contemplate and work collaboratively with each other to achieve a common objective or goal – for example, “The next couple of weeks will be ideal for us; we need to quickly build the community hall that we have been promising for the village.”

A contrasting positioning also prevails where a feeling of disconnectedness may isolate individuals from working collaboratively with each other towards a collective outcome. One could argue that individualism and, consequently, the notion of separation between people in time and space give rise to feelings of despondency, pessimism, and negative anticipatory thoughts (e.g., “I don't think I will be able to achieve this feat; I just can't see a future here”). Importantly, experience of independency may result in a weakened sense of identity for some, especially those individuals who live in communities that encourage and cultivate sharing and communal learning. Our argument then, in this analysis, suggests that historical-social origins and social settings play a major contribution in the instilment of beliefs about a need for belongingness or otherwise.

Some communities and societies, based on their sociocultural geneses, may dictate a natural preference and progression towards individualistic alignment and thinking (Markus & Kitayama, 1991; Triandis, 1989; Triandis, Bontempo, Villareal, Asai, & Lucca, 1988). This does not mean to say, in this analysis that non-collectivist beliefs and behaviors serve as impediments. Western societies and their corresponding sociocultural attributes, in many cases, infer distinctive ethos, values and principles, resulting in the formation of concrete identities and personas (e.g., “I feel really confident and I will make it into medical school; like my father I want to be successful”). Differing from the potency of communalism (e.g., a tribal village in Papua New Guinea), individualistic societies emphasize considerations for discrete learning and development. There is a balance in successes and failures, and individuals have opportunities to plan specific courses in life. Often the case, a myriad of values and expectations combine to cognitively transform individuals to make plans for current and future goals. Recognition by means of public appraisal is an expected norm, and societies place an important focus on individualized achievements and successful accomplishments.

Individuals' family within the community

Apart from the milieus at large, and similar to Bronfenbrenner's (1979, 1989) bioecological perspective, we contend that the family within a community also makes a contribution to the shaping of individuals' learning and development. By this account, considering our examination previously we posit that a community may impart some extraneous influences on the family. Families, drawing from

the values, norms, and expectations of a community, in turn, stipulate a set of personal beliefs for immediate members to adhere and action to. As we alluded earlier, philosophical principles of a community may transpire to all its members some common protocolled behaviors and collective thinking. Examples of this manifestation include, from a Western perspective, the need for individualistic achievement and success (Markus & Kitayama, 1991). Individuals from an earlier age are reared and nurtured towards competition and academic excellence. Consequently, a family in the Western world may feel more inclined to embrace the value pertaining to individualized learning in achievement contexts. One could argue, in this instance, that relations within the family are more 'clear-cut', indicating individual accountability, responsibility, and personalized success. Parents and relatives may provide a stable home environment that then conduces effective learning and development (Daulta, 2008; Niebuhr, 1995). A stable home environment, in this case, may entail the provision of resources (e.g., textbooks) and/or parental involvement in their children's education (Kamaruddin, Zainal, & Aminuddin, 2009; Muola, 2010). In a similar vein, as a major agency of socialization, the immediate family may also serve to enhance children's intellectual growth, aspirations, and achievements by strengthening the quality of the home environment (Daulta, 2008; Jagannathan, 1986). This aspect of quality involves more than just the provision of physical resources, and calls for nurturing, dedication, and the showing of care and love. Likewise a closer analysis would suggest there is more emphasis in the structuring of a learning environment that fosters individual development – for example, a parent may make attempt to provide a safe climate for his/her child to grow up in and learn. The dynamics here are concerned with a cultivated physical infrastructure where individuals receive incentives and devices to mediate their learning and development. One could argue then, that a lack of resources and/or a disruptive noisy environment may attribute to one's failure to ascertain a desired learning outcome. Consequently, in addition to one's own motivation and self-beliefs, other extraneous influences, such as the caring shown by caregivers also contribute to individualized success and failure.

Considering an alternative postulation, we note that the immediate family also connotes other extraneous, but important influences on individuals' learning and development. Embedded in a larger social system of change (Bronfenbrenner, 1979, 1989), the immediate family may transpire and inform individuals of their 'moral' duties and obligations. In this sense, there is emphasis on the gradual passing of values and customs that pertain to a collective whole. In this analysis, parents and caregivers may impart relevant information and beliefs about the need to achieve for others. This interpretation, arising from Markus and Kitayama's (1991) theorization and other related scholarly publications (Dorovolomo, Koya, Phan, Veramu, & Nabobo-Baba, 2008; Nabobo-Baba, 2006; Phan, et al., 2010; Triandis, 1989), suggests that individuals' motives and beliefs for learning and growth may depend more on abstract, philosophical reasoning. The notion of interdependency (Markus & Kitayama, 1991; Triandis, 1989; Triandis, et al., 1988), for example, has been revered by some societies and cultural groups for its principles and standards (e.g., filial piety: Chow & Chu, 2007) towards schooling and behavioral conduct. Individuals, in this instance, may persist to achieve good academic grades for social recognition and collective acceptance.

Interdependency is closely associated with non-Western cultures, whereas individualistic thinking, as we alluded previously, is more embraced by Western cultures at large. Interdependency in schooling, as an example, is often shown by many Asian learners where there is deliberation towards achievements for others. Differing from previous accounts involving individualism, relationships that are bound by collectivist thinking entail loyalty, family commitment, pride, and honor (Chow & Chu, 2007; Malaki, Soriano, & Valdez, 2009; Ng, 2003; Shek & Chan, 1999). In this sense, considering the importance of these attributes, there is an appreciation for the sharing of academic achievement and success by members of a family. In a similar manner, many families from indigenous communities (e.g., the Kiribati people) believe in the philosophy of filial piety (Chow & Chu, 2007), wherein there is close alignment to the conceptions of values for respect, sharing, and communal learning (Nabobo-Baba, 2006). Somewhat discouraged from individualistic competition, many indigenous people prefer communalism and the sharing of knowledge and ideas (Ravuvu, 1988; Teaero, 2002).

The family, in connection with a community at large, imparts principled beliefs and motives

for one's learning and development. The emphasis here, differing from the mentioning of individualistic approach, entails respect and affiliation for communal relations and family values. Rather than one's own desire to achieve, the notion of interdependency as a premise for upbringing (Markus & Kitayama, 1991; Triandis, 1989; Triandis, et al., 1988) may precipitate a sense of moral duty for accomplishment. In this analysis, considering non-Western cultures and societies at large, we connote that interest, motive, and deliberation for learning and development may arise from an ethos that reflects individuals' willingness to share knowledge, and to assist others socially and morally. It is possible, for example, for individuals to approach their learning with a distinctive motive that reflects a sense of caring, kindness, and shared learning outcomes.

If we consider the family as a focal point for development, then its genesis and placement in a society may have implications for educators and learners alike. Motives and desires for learning and achievement in school differ and may reflect an individual's historical origin and contemporary standing in a society. Often, as individuals, our quest to be successful in schools depends on motivation and the reasons why we want to achieve a certain objective. In part, this argument suggests that a person's determination and academic trajectories towards schooling and subsequent professional development maybe a product of his/her time (Phan, et al., 2010; Vázquez & Rapetti, 2006). Struggling through life, financially, may compel some parents to place more aspirations and hope in their children. This passing of expectations, needs, and motives from some parents (e.g., "I want Mary to study hard and go to university") may prompt some children from an early age to view leaning with a purposive deliberation - for example, "I need to study hard so that I can help my parents" and "Having academic qualifications is important as good grades will help me get a job later on in life". This predetermined mindset may instigate and serve as a vehicle for individuals to remain steadfast and persevere.

Drawing from the contentions made, there have been theorizations and research development with individuals from developing and third world countries. Despite different accounts, a consensus is shared amongst researchers in terms of reasons and deliberation for many individuals in these regions to engage in learning. Families that are bounded by unfavorable conditions (e.g., not being able to afford school fees for their children), given their low social class status, are more pessimistic of goal settings and future planning (e.g., "I might ask my son to drop out of school and help support the family")(Leshan, 1952; Vázquez & Rapetti, 2006). This pessimism, influencing one's own future anticipations, has educational implications, such as a decline in academic learning and achievement outcomes. In contrast, however, other researchers have been more positive, and advocate that adverse situations and unfavorable circumstances may even serve to motivate individuals to progress forward in life (Phan, 2009a, 2009b; Phan & Deo, 2008). According to these authors, unsettling social and political unrests may force individuals to look elsewhere for economic vibrancy and development. Many Indo-Fijians in Fiji, from their historical backgrounds dating back to the 1880s, have faced and are facing ongoing poverty and financial difficulties and racial discrimination. Because of this uncertainty and feelings of despair and hopelessness, families rear their children at an early age to work hard and achieve academic success.

The individual in his/her surroundings

Apart from the sociocultural milieus at large, individualized learning and success in achievement contexts ultimately rest with the individual in his/her surroundings. Environmental settings may entail a number of philosophical principles and these, consequently, contextualize individuals to believe and to act accordingly. A community within a larger social milieu may encompass its inhabitants with some common elements and cultural attributes, resulting in a collective system of beliefs and values that may be shared over the course of time. The family, as a recipient of extraneous influences (e.g., cultural ideology), may then impart on its members concrete personal beliefs about the purpose of learning and having academic qualifications. Some individuals, as we mentioned, may have extrinsic motives for engaging in learning (e.g., obtaining good grades to enter university), whereas others may feel more inclined towards achieving success for family pride and honor.

Individualized perceptions and views about learning rest, ultimately, with the individual himself/herself. Personal beliefs, prescribed by our affiliation towards individualism or interdependency thinking (Markus & Kitayama, 1991; Triandis, et al., 1988), shape individuals' cognitive and non-cognitive processes. In this analysis, an individual's desire to achieve and obtain good academic grades may permeate his/her behavior and thinking towards a performance goal orientation (Ames & Archer, 1988; Archer, 1994; Elliot, 1999; Elliot & Thrash, 2001) in learning. In a similar vein, emphases pertaining to academic excellence and achievement outcomes may strengthen individuals' resolve to engage more in performance-based and surface learning strategies (Biggs, 1987; Entwistle, 1981; Marton & Säljö, 1976). These internal cognitive processes may act in tandem with other non-cognitive processes, such as individuals' personal self-efficacy beliefs (Bandura, 1986, 1997) and self-concept (Bandalos, Yates, & Thorndike-Christ, 1995; Marsh, 1993) to influence individuals' aspirations, planning, and learning outcomes.

What is of considerable interest then, in this analysis, is the study of internal cognitive-motivational processes and self-beliefs (e.g., self-efficacy) and how they operate in tandem in a system of change to affect learning outcomes. Taking into account the social milieu and the immediate family at large, how do internal cognitive (e.g., deep processing strategies) and non-cognitive (e.g., self-efficacy) processes function to influence current and future academic learning and achievement-related outcomes (Phan, In press-2012)? In this analysis, we contend that the operational nature of a particular facet (e.g., an individual's resilience) may depend, in part, on its situational placement in different sociocultural 'layers' of development. An individual's preference and/or ability to reflect and to critique (Dewey, 1933; Leung & Kember, 2003; Norris & Ennis, 1989; Schön, 1987; Willsen & Binker, 1993) may, for example, depend on his/her identity, cultural values, upbringing, or learning experience (e.g., "I was never taught this skill (critical analysis); in our society, we are brought up to never question our authority or those in power": Nabobo-Baba, 2006; Phan, 2008b; Teaero, 2002). This postulation, which requires further empirical validation, suggests that internal cognitive-motivational processes of learning exist within a hierarchical system where multiple layers and factors interact dialectically.

From our previous examination in the preceding sections, this avocation is persuasive and has theoretical credence for advancement. The advent of sophisticated statistical techniques, such as hierarchical linear modeling (HLM)(Little, 2000; MacCallum, Kim, Malarkey, & Kiecolt-Glaser, 1997; Raudenbush & Bryk, 2001) and latent growth modeling (LGM)(Bollen & Curran, 2006; Duncan, Duncan, Strycker, Li, & Alpert, 1999; Hancock & Lawrence, 2006) has allowed researchers to study the complexities of various layers that define an individual's development (Lau & Nie, 2008; Marsh, et al., 2008; Walker, et al., 2004). Multilevel analyses with correlational data may, in this case, allow researchers to test the potency of the society-family relationship, and/or the family-personal interactions. Most significantly, there is a strong emphasis by a number of researchers to acknowledge the contexts and environmental settings that may characterize individuals' learning and development (Baek & Hye-Jeong, 2002; Church, Elliot, & Gable, 2001; Nijhuis, Segers, & Gijsselaers, 2007; Schroeder & Kelley, 2009; Wong & Watkins, 1998). Notably, arising from this line of empirical evidence is the notion that cognition and motivational beliefs for learning and development relate and embed holistically with other internal and external factors.

Conclusion

Various theories have been offered to explain and predict individuals' learning and development. There are a number of theoretical models (Bandura, 1997; Bronfenbrenner, 1989; Okagaki, 2001; Vygotsky, 1978), for example, which situate individuals' learning and development in a holistic system made up of different internal and social factors. Significantly, arising from this collective insight is the illumination that various intricate relations may combine to define a person's acquiring of knowledge. Extending the tenets of the aforementioned theorists (Bronfenbrenner, 1989;

Okagaki, 2001), we proposed a similar conceptualization that entailed a multi-layered, hierarchical system of interactions: community, family, and the individual. We contend that the interrelations between the three facets are intertwined and, more importantly, any form of development requires an input of one (e.g., the community) and the output of another (e.g., the family). Similar to Bandura's (1997) tenets of reciprocal determinism, we connote that the relations between the community, family, and the individual are bidirectional – for example, an individual's willingness to persist in current and future studies may influence other members of the immediate family with his/her motives and views; similarly, the immediate family may express its stance, commitment, values, and beliefs to the community via electoral voting, town hall meetings, etc. Consequently, arising from a general consensus through voting, a community may refine its positioning, identity, and ethos at large.

In our discussion so far, we made an ambitious attempt to situate the study of human cognition within a wider sociocultural context. In the last couple of years, there has been an emerging trend in social sciences research with the study of amalgamation of both extraneous factors and internal cognitive, affective, and motivational processes (Baek & Hye-Jeong, 2002; Lau & Nie, 2008; Walker, et al., 2004; Wong & Watkins, 1998). Given this interest for the inclusion of non-internal factors, we suggest that educators advance this avenue of inquiry considering this triarchic framework in different social and cultural settings. How does the impact of a community on a family and its immediate members differ between Western and non-Western contexts? What are some of the extraneous factors from environmental surroundings that could uniquely shape a community? We mentioned, for example, that political instability, financial constraints and poverty, and racial discrimination may permeate into some societies, making this experience a *status quo*. No doubt other societies may instill feelings of serenity, confidence, and technological advanced development. Consequently, by means of statistical comparison, we strongly suspect disparities in results and interpretations for different populations.

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