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Dynamic Psycho-Linguistics: Impact of the Social Interaction System in the Individual Psycholinguistic Prototype

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Abstract

Speaking is a cognitive-motor activity apparently simple, which differentiates men from other animals and is made possible by a vast network of cerebral, cortical and subcortical structures. Language implies the relationship of the human being to his world while Psycholinguistics is the dynamic language process that leads to a mutual connection with the world external and with the other, which is other than self. In the history of Albanian psycho-pedagogical thinking there are evidences that reveal the efforts and contributions to understand and interpret the phenomena and problems directly related to the development and education of students of different school ages. The discussion of complex linguistic topics, communication and relationships is related not only to the exhaustion of the definition, but also the ability to take into consideration the circumstances that make them a social-ethnic reference system with the contribution of main references such as linguistic psychology, philosophy of language, linguistics and semiotics, cognitive level analysis and phenomenological aspects in a daily dimension, but also in the form of meanings, concept of reciprocity, social connotation and the dynamic process in the whole.

Keywords: psycholinguistics, communication, psycho-pedagogical thinking, formation of psycho-linguistic construct.

1. Introduction

In their endeavors to understand human identity, specialists of psychology and sociology have used different approaches and viewpoints. Their arguments range from the purely intrapsychic representation and macro-social views to the identification of similar processes and terminologies (Gecas et al., 1995; House, 1977). Searching for a stable identity status is one of the most significant approaches of the personality study in the last three decades (Marcia, 1966). The big sources of identity vary in degrees of significance: the most tangible resources appear in the individual's behaviors and affiliations, while the least tangible resources build our personality

traits and features. Severe personality pathologies live on a continuum with normal personality. In both representative cases, the preservation of the reality-testing ability is seen. While in normal personality, functionality is adapted and flexible, in the personality pathologies there is rigidity and maladaptation. Our personality traits are partly created by the defenses we use in an automatic unconscious mode and repeatedly under different circumstances. Flexibility and adaptive function of a normal personality reflect the flexible nature of defensive operationalization of a healthy and matured personality. On the other hand, rigidity that characterizes the levels of a pathologic personality reflect the non-affiliation of mechanisms and operations of defense. Individuals with a pathologic personality are generally based on defensive mechanisms of repression and splitting (distortion of image in the mental representations) what constitute the basic features of a “neurotic level” of the personality treated in this study. It is precisely the relative stability and the non-affiliation of neurotic defenses that are attributed to the process of development of identity which maintains the layer of rigidity in the pathologic personality.

In personality pathologies, the maladaptive personality traits may appear as inhibitors of the normal behavior “inhibitory behavioral pattern” or as an extension of certain behaviors “reactive behavioral patterns”. In most individuals these patterns are both present. In the case of inhibitory personality traits there is viewed a lack of behavioral patterns that may be suitable for a certain situation. In the reactive personality trait, we encounter behavioral patterns that are not necessarily needed for certain situations.

The seven elements of Personality Organization, when four sub forms are treated in an independent way from the escalating evaluation, involve:

- (1) Integrity, which implies the ability of the person to view self in a stable, complex and accurate way;
- (2) Object Relations, the ability to maintain intimate, stable and satisfying relationships;
- (3) Affect Tolerance, the ability to experience the full range of age-expected emotions;
- (4) Affect Regulation, flexibility in using coping strategies;
- (5) Superego Integration, the ability to use a consistent and mature moral sensibility;
- (6) Reality Testing, the ability to appreciate conventional notions of what is realistic;
- (7) Ego Resilience, the ability to respond to and recover from stress resources.

Evidences supporting Personality Organization are rooted in Freudian thought, distinguishing from “primitive” or “pre-oedipal” types to “the more integrative and oedipal” of psychopathology. Depending on psychopathology types, there is an implication of different developmental levels of psychopathology. Authors (Kernberg, Caligor, 2005, and McWilliams 1994- 2011) in their meta-analytical studies, have instrumentalized these distinctions and outlined some core features in determining Personality Organization level (Caligor & Clarkin, 2010; Kernberg & Caligor, 2005; McWilliams, 1994).

Other studies by Koelen and colleagues suggest that the level of Personality Organization is connected to treatment outcomes and would be the only important predictor either in the pathological course or in response to treatment (Koelen et al., 2012). A difference between the approach of Personality Organization and diagnostic approach DSM and ICD is that the latter do not clarify a casual relation between personality structure and personality disorders.

In her studies, Nancy McWilliams (2011) reasoned that the describing axis and Personality Organization level are independent from one-another. Each form of personality pathology might be manifested in different levels of Personality Organization. Differently from the first psychodynamic line researchers, another researcher introduced a Model of the Two-Polarities

of the Prototypal Organization, a model that bridges the approaches of diagnosis and treatment in the field of psychodynamic classification. In congruence with theoretical approaches to personality disorders, impairment in the level of self and others, Blatt argued both in the descriptive and theoretical viewpoint, that personality issues are characterized initially by difficulties in attachment and difficulties with self-definition that are set in this two-dimensional continuum which he treated as a Two-Polarity Model (Livesley, 2008; Skodol & Bender, 2009). The model proposed by Blatt in 2008, argues that relations and self-definition are the two fundamental psychological dimensions that create the theoretical matrix for the understanding processes of personality development; variety of normal personality organization; concepts of creation of psychopathology and the integration of therapeutic action mechanisms. A well-functioning personality, according to him involves the balance of development in interpersonal relation and self-definition. Thus, the mature levels of relationship facilitate development of a stable identity, autonomy and self-understanding that influence to integrated interpersonal relations. Throughout development, traumatic experiences and biological predisposition may create distortions in the developmental lines of individuals and the neglect of relations with others. Referring to the access of Prototype described in this study research, psychopathologic issues may be thought as *Prototypes* in the two-dimensional model. Prototype of each individual in different stages of development reflects unique means (prototypes) of dealing with the balance of relationship and self-definition, ranging from “*normal personality function*” to “*full symptomatic issues and levels of personality disorders*” (Blatt & Shichman, 1983; McWilliams, 1994). *Personality Prototypes* are composed by multidimensional and hierarchic structures and represent an entirety of descriptions rather than the simple ones of anxiety, fear, despair etc. Prototypes have an abstract nature as they do not constitute specific categories. Moreover, the quantity of prototypical modes for conflict resolution which can be used by an individual is limited. Boundaries between prototypes are breached which allows individual to use features from different prototypes. In the clinical setting, the spectrum of prototypes that constitute a personality may affect personality development in the form of synergistic interactions of experiences of relationships and self-definition, experiences of closeness and splitting, similarities and unsuitableness and in the consolidation of these interactions as to the principle of “chain” (Safran, Muran & Eubanks-Carter, 2011; Safran, Muran, Samstag & Steven, 2002). As the philosophical postulate in the *Thematic of Dasein* argues: *My being is the center focus of existence. We are always related by and related to “our being”*. It is a vital parameter for us. It is just this being to whom I am concern that relates *my possible ways for being*. Existence is therefore a stand beyond self-possibilities (Heidegger, 1962).

2. Classification of mental categories through the Psychodynamic Diagnostic Manual (PDM) and the relation of psycholinguistics to it

In the psychodynamic perspective the achievement of a stable and positive comprehension of self and the establishing of satisfying and long-lasting relationship are probably the two fundamental tasks of the individual development.

PDM classifies mental health in two great areas:

- (a) Personality Patterns (Axis-P);
- (b) Mental Functioning (Axis-M).

The study of the degree of personality organization or personality disorder severity is on the basis of PDM.

The manual is based on current neuroscience, treatment outcome and empirical research which have shown that patterns of emotional, social and behavioral functioning involve a great area of fields interacting together. Studies emphasize the significance of analysis and

interpretation of the wholeness of emotional and social patterns. Researchers as Blatt, Auerbach, Zuroff, Shahar, Norcross (2002), and Wampold have concluded that the nature of the psychotherapeutic relationship altogether with operating aspects of mind and brain, predicts more outcomes than any specific treatment approach. The nature and range of predictions is in the focus of patterned organizations in the Psychodynamic Diagnostic Manual. PDM treats the entirety of human development: adults, adolescents, children and toddlers. The adult assessment part upon which we have enabled the present study, begins with the adult personality. P-Axis of Personality Patterns and Disorders is placed first in the PDM system as the collected data and their symptoms could not be understood or treated without a depth comprehension on the personality features of the individual. P-Axis considers two areas with a range from a *healthy personality* (lack of a personality disorder) to a *neurotic level* of personality disorder. Levels of personality organization (healthy, neurotic, borderline and psychotic) are defined by the assessment of the individual capacities. These capacities include: *identity maturation, ability for stable satisfying relationships, affects tolerance and regulation, moral reasoning, reality testing and the ability to respond to and recover from stress*. After determining the entire level of personality organization, we consider the P -Axis personality patterns (which may be adaptive and cause minimum if any impairment) or into a more pervasive personality disorders (which repeatedly cause pain to self or others). Then, the PDM P-Axis considers each personality disorder as their temperamental, thematic, affective, cognitive and defense patterns. The core preoccupation or concern is manipulating or being manipulated. The primary effects of this personality are *rage* and *envy*. Characteristic pathogenic belief about self is “*I can do everything*”. Characteristic pathogenic belief about others is “*All are selfish, manipulative and dishonest*”. The manual classifies a depressive personality disorder with subtype of introjective (self-critic), analytic (high reactivity to loss and rejection) and with a converse manifestation; the hypomaniacal personality disorder (high energy, counter-depressive, fear from closeness etc.). PDM also suggests treatment when there are enough evidences. Introjective type responds better to interpretations and insight whereas the analytic type responds better to the present therapeutic-social relationship. Based in these grand prerogatives researchers from the Sapienza University of Rome, created a list with 19 Prototype Disorders in psychoanalysis related to four foundations of personality. Authors integrated these categories in the Psychodiagnostic Chart that assess personality in four basic elements: (1) healthy, (2) neurotic, (3) borderline, and (4) psychotic (Gordon & Bornstein 2012; Gordon & Stoffey, 2014).

The second dimension of PDM, Mental Functioning M-Axis, gives a detailed picture of the abilities that contribute to the individual personality and a degree of the overall psychological health or disturbances. M-Axis abilities include: *the capacity for regulation, attention and learning; the capacity for relationships* (including depth, range, and consistency); *the quality of internal experience* (level of confidence and self-regard); *the capacity for affective experience, expression and communication; the level of defensive patterns; the capacity to form internal representations; the capacity for differentiation and integration; the self-observing capacities* (psychological mentalities) and *the capacity for internal standards and ideals*, that represents the sense of morality. Each of the described capacities was translated into specific statements in the present study. A normal identity is associated with a consistent experience of time and space of self and the Significant Other and with the capacity to assess attributes and internal experiences in depth, complexity and wholeness. This identity is also associated to the capacity of the individual for investing in time on his professional, intellectual and creative concerns. The dynamism is routed according to values, opinions, tastes and beliefs of the individual. Individuals with a pathology in clinical identity appear with an obvious concern in the conception of experiences of self and the world. The clinical and pathological identity is followed by a fragmentarization and instability of understanding self and significant others experiences in time and space. The subjective experience (Axis-S) for self and others is often poor, with lack of depth, superficial and polarized. Tastes, opinions and values are not linear, taken by others around

but they could easily be shifted. An individual with identity pathologies have a lack in the capacity of understanding others and cannot react to the social issues that surround him or her. Despite the appearance of this pathological identity form in DSM as *Borderline Personality Disorder*, a range of identity pathologies characterize the majority of severe personality disorders. Clinical setting sees the individual with an identity pathology as associated with high level of treatments withdrawn, impairment of self-reflecting capacities, difficulties to maintain therapeutic alliance, tendency to concrete plans for reality testing and tendency to impulsive actions.

In its expressive form of the pre-conscious, language is the entity that link thoughts and external and internal interaction. Our language structures are necessarily linked to the psychodynamic energy of personality structures and inter-personal abilities of each single personality. The basic function of language, according to psycholinguistic studies, is not the correctness that can be one of the many purposes for what people talk about, but achieving any truly energetic exchange that comes from mutual cross-materialization. We communicate not only because we speak the same language, but also by acting on symbols and their meanings, keep the communication channels open that allow us to develop the state of psychic conversation and mediation. The use of words is an action and interaction, not only when we create and carry words, but also when we remember them in our minds and when we immerse in our thoughts on internal dialogues. Humbolt (2000) expanded his study of the social dimension aspects of language, based on the variety of purposes and functions expressed by the language.

He identified six language functions as follows:

- *Referential*: discourse refers to something accurate and essential to the information that contains the message;
- *Emotional* (or expressive): discourse highlights an inherent state of mind, emotions, feelings, identity;
- *Fatigue or contact*: discourse points to the continuity of communication;
- *Imperative*: discourse conveys an order;
- *Metalinguistic*: discourse serves to define other signs such as the use of language for describing Self and the independent cognitive structures;
- *Aesthetic*: discourse draws attention to how words are used, communicating mainly through their form.

The mediating function of language connects the *Ego* to the world, or human beings within the material and immaterial world. Representing an object in order to become a concept must be objective, but the process of objectification is realized only through the mediation of the language and the latter is formed only within the word. In fact, the ego is not in an abstract and transcendent individual, but in a concrete member of a collective that is defined in relation to the other (Gazillo et al., 2014). Therefore, objectification becomes linguistic in intersubjectivity, reciprocity and dialogue. In the response of the *other* not only the does the Ego know the world, but also the other by itself. The function of the language is expressed in the object-to-object relationship, as a mediating example between the Ego and the world and mostly in the subject-subject relationship, according to a dialogical model of knowledge. Language cannot be understood only as a *poiesis* (theoretical) process, but mainly as a *praxis* (practical) one. Objectification of the thought occurs only through language, more precisely when the word is returned, it resists the expressed Ego from the Buberian Other-Thou. The objectification of subjectivity is thus generated in dialogue, because in the dialogue where they meet, the I and You know each other, the objects take shape and the union of these objects constitutes the world. Objectivity in dialogue is always intersubjective and psychic subjectivity is transmitted only through the psychodynamic structures of personality and language organization.

3. Conclusions

Language, communication and the human-social relationship are the main forms that interact in dependence on each other and at the same time that complement a particular social construction, which is analyzed and articulated in the psychodynamic organism. Language is no longer regarded simply as a system of sounds and a set of grammatical rules, but is studied in the subject-object relationship of the individual who uses it, thus becoming an instrument of communication and interaction in the social life.

The psycho-educational and psycho-linguistic contexts are significantly defined by terminology that defines the meaning of the discourse and affects the way interlocutors interact with each-other and in the social world. The Psychodynamic Diagnostic Manual as a Taxonomic form of a personality organization and a tendency of being towards the conscious and the unconscious, defines the object-subject boundary as nominative and dimensional form and content. Human being, after such a prototype identity, becomes part of the social life through communication not only as a subjective process, but also as a process that generates relationships between different psychic entities. Therefore, we can conclude that linguistic communication shapes individual lives as a psychological dimension and social life as a social dimension in its entirety.

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Examining the Effects of Organizational Learning on Workforce Agility through Psychological Empowerment

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Abstract

This era currently has become a more competitive and volatile environment. Companies must be invariably innovative, adaptive, and open to any changes. Constant learning and being psychologically enabled at work will lead the employees to be agile. The purpose of this research is to examine the relationship between organizational learning and workforce agility with the moderation of psychological empowerment. This study used a quantitative approach by distributing an online survey to the employees that work in commerce companies with N= 138 people. The research data obtained were then analyzed using descriptive statistics, confirmation factor analysis (CFA), and structural equation modeling (SEM). The results showed that organizational learning has a positive and significant relationship with psychological empowerment. Psychological empowerment has a positive and significant relationship with workforce agility, and psychological empowerment fully moderates the relationship between organizational learning and workforce agility. Based on the results of this study, psychological empowerment has an essential role in organizational learning to increase labor agility.

Keywords: organizational learning, psychological empowerment, workforce agility.

1. Introduction

At present, the implementation of information and communication technology is overgrowing, which has led to industry 4.0 (Vasin et al., 2018). The focuses of industry 4.0 are on the establishment of intelligent products and production processes that transforming the industry and changing various aspects of human life (Brettel et al., 2014). The fourth industrial revolution has changed work environments from assignments-based attributes to the human-focused qualities in various industries, such as government-industry, entrepreneurs, private sectors, and education sectors (Shahroom & Hussin, 2018). As a result, employees must respond to this dynamic and competitive environment by being agile (Hormozi, 2001). Agility is a fast and appropriate response to changes and threats facing by both organizations and workers (Chonko & Jones, 2005; Rajan, Solairajan & Jose, 2012).

As the business grows in competitive markets, the agile organization has been discussed as the most predominant to deal with the uncertain and unpredictable environment (Sherehiy & Karwowski, 2014). In this regard, workforce agility has been critical and essential to creating an agile organization (Breu et al., 2002; Sherehiy & Karwowski, 2014). Workforce agility is a proactive, adaptive, and generative behavior of the workforce (Dyer & Shafer, 2003). Proactive

refers to seeking for opportunities actively to contribute to organizational success and lead in pursuing promising opportunities. There are two aspects of proactive behavior, namely, initiate and improvise. The behavior of adaptive means performing in different capacities across levels and moving from one role to another quickly and simultaneously. On the other hand, Hopp and Oyen (2004) in their study stated that workforce agility has an impact on four aspects of the organization, namely costs, time, quality, and diversity.

- Organizational learning has not a positive and significant effect on workforce agility.
- Psychological empowerment has a positive and significant effect on workforce agility.
- Organizational learning should be integrated with psychological empowerment to improve workforce agility.

There are three dimensions of workforce agility: proactivity, adaptability, and resilience (Sherehiy, 2014). Proactive is the situation when a person initiates the activities that have positive effects on the changing environment, such as anticipate problems related to changes, initiate activities that lead to solutions to problems related to changes and improvements in work, and make a solution of the problems related to changes (Griffin & Hesketh, 2003). Adaptive refers to change and modification of oneself or one's behavior to better fit a new environment (Griffin & Hesketh, 2003). For instance, when someone is dealing with people with different backgrounds and experiences, or when learning new skills and tasks. Resilience is one's ability to respond efficiently even under stressful conditions, environmental changes, or experienced failure. These include a positive attitude to the changes, tolerance of uncertain and unexpected, and stressful situations (Sherehiy, 2014).

Studies of workforce agility from Sohrabi, Asari and Hozoori (2014) and Muduli (2016) were associated with organizational practices, such as employee involvement, organizational structure, organizational intelligence, reward system. One of the essential variables related to workforce agility is organizational learning, which is to create employees to become agile by implementing development or training programs (Alavi et al., 2014; Muduli, 2016). Organizations with a learning environment can encourage employees to be more open to new things and more proactive (Gong, Huang & Farh, 2009). A learning environment can encourage employees to be more open and innovative in seeking new ideas. Their knowledge and learning skills enhance the ability to adapt and respond to changes (Alavi et al., 2014).

H1: Organizational learning is positively and significantly related to workforce agility.

Organizational learning is essential for employees to be more flexible and adaptable. Learning itself is how people change in a situation that tends to persist (Spector & Davidsen, 2006). An organization with a flexible and responsive structure can respond to the new challenges and changes much faster than its competitors (Wujiabudula & Zehir, 2016). Organizational learning is a method to create new knowledge and gain insight from people's experiences at work (Naranjo-Valencia, Sanz-Valle, & Jiménez- Jiménez, 2010).

There are four dimensions of organizational learning, namely: commitment to learning, open-mindedness, shared vision, and knowledge sharing that managers should develop (Alavi et al., 2014). Commitment to learning is the extent to which organization values and promotes learning and fosters a learning environment (Wujiabudula & Zehir, 2016). Committed organizations need to have learned as a significant investment. Open-mindedness is the willingness in organizational to critically evaluate the organizations' operational, such as information across departments and to embrace new innovative ideas to employees (Calantone, Cavusgil & Zhao, 2002). The shared vision indicates the typical direction for employees in an organization for learning, created by mutual interaction between individuals (Wujiabudula &

Zehir, 2016). It affects the learning direction and leads to an increase in the quality of learning (Calantone et al., 2002). Knowledge sharing is how knowledge disseminates and spreads among different departments in an organization, consisting of a collaborative alliance, sharing knowledge, and learning from one another (Wujiabudula & Zehir, 2016). The information is disseminated and spread by the owner, and its employees absorb it.

The research from Sheikhzadeh, Salarzahi and Yavari (2016) showed a significant and positive relationship between organizational learning and psychological empowerment. Thus, an organization must invest in organizational learning to increase employee empowerment level. Meanwhile, findings of Muduli (2016) showed that learning and training conducted by the organization will provide openness, confrontation, trust authenticity, pro-action, autonomy, collaboration, and experimentation which can foster the workforce to be more agile.

H2: Organizational learning is positively and significantly related to psychological empowerment.

Psychological empowerment is a set of psychological states needed by someone related to his job to feel a sense of control. The empowerment itself refers to individual beliefs about their role in the organization (Spreitzer, 2007). Four dimensions reflect psychological empowerment: meaningfulness, competence, self-determination, and impact (Spreitzer, 2007). Meaningfulness is the value of a work or task that is related to people's standards; for example, an employee with high meaningfulness has commitment and involvement (Thomas & Velthouse, 1990). Competence or self-efficacy refers to an individual's belief that he can take the necessary actions at work, for instance, the persistence when facing obstacles (Muchinsky, 2007). Self-determination refers to the behavior that reflects self-expression rather than behavior imposed by the environment (Muduli, 2016). The impact is the extent to which an employee's behavior can have a positive effect on his work environment, such as influencing strategic plan (Thomas & Velthouse, 1990). Training and development for employees in an organization can improve the workforce's competency, leading to feeling competent (Muduli, 2016).

Psychological empowerment also showed had a positive and significant impact on affective commitment to change (Mangundjaya, 2019), which means that with psychological empowerment, people may commit to change and adapt to the organizational change in the organization. Moreover, Psychological empowerment provides necessary conditions for organizations' improvement of the organizational agility to be more competitive (Shah et al., 2017). The organization should plan a psychological empowerment program to make employees feel empowered and capable. Hence, employees can better respond to customers' needs and adapt to a complex and changing environment. The dimensions of psychological empowerment are keys to promoting workforce agility (Muduli, 2016). Meaningful can motivates the workforce to have a high commitment and more involvement. High competency level of the workforce can increase their readiness to be agile by proactively innovate their skill (Muduli, 2016). Strong self-determination prepares the workforce to respond to unexpected requests of customers and interpret external change to act following the organizations' strategy (Chonko & Jones, 2005). Impact, an employee that feels that they can influence others or the work environment, will be more collaborative across projects, leading to increased agility (Chonko & Jones, 2005).

H3: Psychological empowerment is positively and significantly related to workforce agility.

The findings of Muduli (2016) showed that organizational practices, including organizational learning integrated with psychological empowerment, were strongly related to workforce agility. Thus, psychological empowerment is a significant mediator between organizational learning and workforce agility. According to Muduli (2016), organizational learning correlated with psychological empowerment, which is meaningfulness, competence, self-determination, and impact to promote workforce agility. An organization needs to adopt suitable

organizational learning, such as skill development, for enhancing psychological empowerment that can foster workforce agility.

H4: Psychological empowerment mediates between organizational learning and workforce agility.

The environmental changes led many companies in Indonesia to be encouraged to innovate, such as the commerce industry, including e-commerce. According to Shahjee (2015), e-commerce can be interpreted as the process of buying and selling, exchanging products, services, and information through the internet network. Besides many benefits for customers and providers in this industry, there are several challenges faced, such as high competition, poor logistics, supply chain, and a variety of payments. Many companies are increasingly competing to employ experts qualified in information technology and business management and have a comprehensive understanding of both technical and business capabilities (Yazdanifard & Zargar, 2012). Hence, learning in an organization is essential to increase employees' skills to make employees flexible and agile in this industry.

This research tries to examine the role of psychological empowerment as a mediating role in the relationship between organizational learning and workforce agility in commerce companies, as Figure 1 below.

2. Method

2.1 Participants

The data gathered from top managers, mid-level managers, and staff to get a complete picture of these variables. The quantitative method of this study is using a convenience sampling technique, which is a type of nonprobability sampling where participants of the population meet specific criteria, such as easy accessibility or the willingness to participate (Dornyei, 2007).

2.2 Instruments

The survey instrument of organizational learning was adapted from Alavi et al. (2014) using a self-report questionnaire. Organizational learning has 17 items measured by four dimensions: commitment to learning, open-mindedness, shared vision, and knowledge sharing. Cronbach's alpha of organizational learning was 0.915. Second, the workforce agility scale adapted from Sherehiy et al. (2008), measuring proactivity, adaptability, and resilience. Each dimension of the workforce agility scale had five items. Cronbach's alpha of workforce agility was 0.813. Furthermore, the Psychological empowerment scale has 12 items and measured by an employee's psychological state related to his job to feel a sense of control, including meaning, competence, impact, and self-determination. This variable was developed by Spreitzer (2007), then modified and translated by Mangundjaya (2014). The Cronbach's alpha of this scale was 0.897. All the instruments are ranged from 1 (strongly disagree) to 6 (strongly agree). This study employs a Structural Equation Modelling (SEM) to investigate the relationship among variables by using SPSS v. 22.0 and AMOS to analyze data.

3. Results

The number of samples of this study was 138 employees in commerce companies in Indonesia. From this number, descriptive analysis through demographic characteristics of the respondents in Table 1 shows that the majority were women as many as 96 (70%). In terms of age, most respondents have the range of age 20-30 years amount to 115 people (83%), followed by

respondents aged 31-40 as many as 23 people (17%). Most respondents have bachelor degrees (N=112 or 81%), and a master's degree (N=19, 14%). In terms of job tenure, 62 respondents (45%) have been working in their companies for less than two years. Followed by 60 respondents (43%) who had job tenure between 2-5 years.

Table 1. Demographic data of respondents

Characteristics	Classification	Frequency	%
Gender	Male	42	30%
	Female	96	70%
Age	20 – 30 years	115	83%
	31 – 40 years	23	17%
Education	Senior High School	4	3%
	Diploma	3	2%
	Bachelor	112	81%
	Master	19	14%
Tenure	<2 years	62	45%
	2 – 5 years	60	43%
	>5 years	16	12%

Table 2. Demographic different test among variables

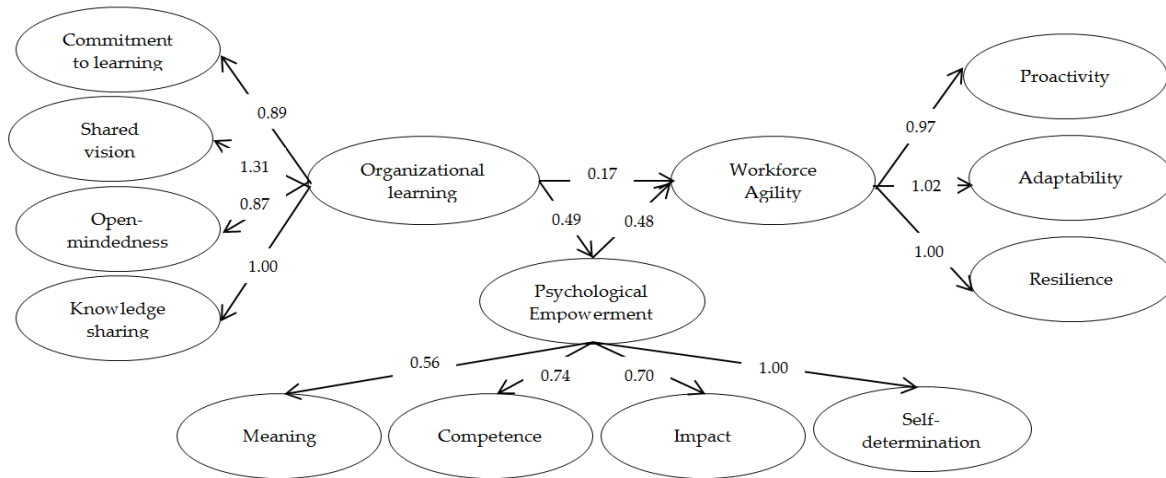
	Gender		Age		Education		Tenure	
	t	Sig.	t	Sig.	F	Sig.	F	Sig.
Workforce agility	2.14	0.03	1.09	0.27	0.36	0.77	0.10	0.12
Organizational learning	1.92	0.05	0.94	0.34	0.06	0.03	0.62	0.53
Psychological empowerment	1.35	0.17	2.61	0.01	0.52	0.66	0.91	0.40

Table 2 presents the independent t-test on the comparison of male and female of each variable. There were significant differences ($\alpha=0.03$) in workforce agility between males and females. Meanwhile, it found no significant differences ($\alpha=0.05$) in organizational learning and psychological empowerment ($\alpha=0.17$) between males and females. As shown above, there were no significant differences in workforce agility ($\alpha=0.27$) and organizational learning ($\alpha=0.34$) of employees aged 20-30 years and 31-40 years. Meanwhile, there were significant differences in psychological empowerment ($\alpha=0.01$) between employees aged 20-30 and 31-40 years.

Table 2 also presents the results of one-way ANOVA, which revealed no significant differences in workforce agility ($\alpha=0.77$) and psychological empowerment ($\alpha=0.66$) among all levels of education. As shown, there were significant differences in organizational learning ($\alpha=0.030$) among all levels of education. From the results of one-way ANOVA, it revealed that there were no significant differences in workforce agility ($\alpha=0.12$), organizational learning ($\alpha=0.53$), and psychological empowerment ($\alpha=0.40$). This result implies that although there is some relatively clear mean score difference between participants from different years of services, these differences are statistically not significant.

Further, confirmatory factor analysis (CFA) was conducted to test how well the measured variables represent the number of constructs. The good model fit would be justified with several goodness-of-fit indices such as; Chi-square X^2 , $X^2 / df < 3$; Root mean square error appropriation, $RMSEA \leq 0.10$; (Byrne, 2009); comparative fit index $CFI > 0.90$; Tucker-Lewis index $TLI > 0.90$ (Schumacker & Lomax, 2004). The results of CFA of organizational learning scale showed that the model was fit ($X^2 / df=1.386$, $RMSEA=0.053$, $CFI=0.966$, $TLI=0.950$). The model workforce agility scale was also acceptable fit ($X^2 / df=1.533$, $RMSEA=0.062$, $CFI=0.935$, $TLI=0.888$). The third model, psychological empowerment scale was fit ($X^2 / df=1.198$, $RMSEA=0.038$, $CFI=0.989$, $TLI=0.986$).

Figure 1. Research model



Next, the analysis of measurement model using AMOS shows that the structural model is acceptable fit by following goodness-of-fit indices, such as; $\chi^2 / df=1.327$, $RMR=0.097$, $RMSEA=0.049$, $CFI=0.902$, $TLI=0.892$. Further, the testing of 4 hypotheses was analyzed based on the result of the analysis of causality relationships between research constructs shown in table 3.

Table 3. Regression weights, direct effects, indirect effects, and total effects

	Estimate	P	Direct effects	Indirect effects	Total effects
Organizational Learning → Workforce Agility	0.144	0.07	0.174	0.306	0.481
Organizational Learning → Psychological Empowerment	0.411	**	0.465	0.000	0.465
Psychological Empowerment → Workforce Agility	0.617	**	0.481	0.000	0.481

Table 3 shows the results of the hypothesis. In testing the influence of organizational learning on workforce agility, hypothesis testing indicated that organizational learning has no significant positive effect on workforce agility. Thus, H1 was not supported. Meanwhile, in testing the influence of organizational learning on psychological empowerment, hypothesis testing proved that organizational learning has positive and significant effects on psychological empowerment, or H2 was supported.

The next hypothesis testing is the influence of psychological empowerment on workforce agility. The result showed that psychological empowerment has a positive and significant effect on workforce agility, or H3 was also supported. It also shows, since the indirect effect on organizational learning to workforce agility is greater than the direct effect, then the mediation occurs. Thus, psychological empowerment fully mediates the relationship between organizational learning and workforce agility, or H4 was supported.

As shown in figure 1, each variable has the contribution of each different factor. Shared vision ($\beta=1.31$) gives the most significant contribution in organizational learning, which means an organization that has a prevailing direction for employees to continuous learning, would have a high impact for employees to be more agile and empowered. This result is also in line with Alavi's (2014) findings, indicating that shared vision has the highest factor loading in relationship with workforce agility.

The result also showed that self-determination ($\beta=1.00$) is the highest contributor to psychological empowerment. Thus, the employee who has the autonomy of their work behavior would give a significant impact to mediate organizational learning and workforce agility. According to Chonko and Jones (2006), agile employees must have strong self-determination that can prepare them to respond to customers' unexpected requests.

4. Discussion

Organizations should prepare their employee to be adaptive and open-minded to changes in this dynamic environment. Agility is one of the most important things that should be improved to respond. Meanwhile, based on path analysis using SEM, the results obtained from hypothesis 1 indicated that organizational learning does not have a positive and significant effect on workforce agility. The finding is not in line with Alavi's (2014) study, which showed that the atmosphere of learning in an organization encourages employees to be more agile.

However, the results obtained from hypothesis 2 indicated that organizational learning has positive and significant effects on psychological empowerment. Thus, increasing the learning ability, such as training and development of the employee, will lead them to feel more competent. The findings line with the study from Sheikhzadeh, Salarzahi and Yavari (2016), who showed that organizations with an excellent learning atmosphere, open to new knowledge, and commits to learning could increase the empowerment of employee. Thus, learning in an organization is essential to improve employees' self-determination, to feel competence, impact, and meaningful tasks. Besides, the research findings from Rahimian et al. (2014) also showed that there is a positive and healthy relationship between organizational learning and psychological empowerment.

The result of hypothesis 3 shows that there is a significant effect of psychological empowerment on workforce agility. The results are consistent with the research findings from Shah (2017), who showed that psychological empowerment has positive impacts on improving agility. This research is also in line with Mangundjaya (2019) study, which shows that psychological empowerment had a positive impact on affective commitment to change. Thus, people who have psychological empowerment will commit to organizational change and accept and adopt the change, which makes them agile. An employee who has self-efficacy and has a commitment to their work can adapt themselves quickly with unexpected and changing environments. According to Chonko and Jones (2005), agile employees must have strong self-determination, which can help them respond to customers' unexpected requests.

This study also showed that organizational learning on workforce agility occurs indirectly and requires mediation by psychological empowerment. According to Muduli (2016), psychological empowerment may contribute to increased flexibility and a more proactive attitude. In other words, organizational practice, such as training and development, is necessary for enhancing psychological empowerment, which can foster workforce agility. It is essential to be considered for managers to create a suitable learning environment in an organization. When an organization practicing learning, their employee feels competent and meaningful at their work. As a result, when employees feel empowered, they will be more capable of responding to their customers' needs, more flexible and adaptable with complex and unpredictable situations.

There are some considerations embedded in this study: First, it recommends that other mediating variables also observed. Many attitude variables can act as mediators of the relationship between organizational learning and workforce agility. Second, to get more comprehensive results, data collection methods can be added qualitatively, such as through interviews and group discussions.

5. Conclusion

This study aims to examine the relationship between organizational learning and workforce agility by exploring psychological empowerment as a mediator in commerce companies in Indonesia. The results showed that organizational learning has a positive and significant effect on psychological empowerment. Furthermore, there is a significant effect of psychological empowerment on workforce agility. However, organizational learning has not a positive and significant effect on workforce agility. These results indicate that organizational learning should be integrated with psychological empowerment to improve workforce agility. This study concludes that companies can encourage their employees' agility, such as to be more open to new ideas, adapt and respond to changes quickly, responsibly to their clients' needs, and be more competitive. They can improve agility by practicing organizational learning that enhances psychological empowerment.

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Dropping Out From Educational System – 2nd part

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Abstract

This study aims to present with dropping out from any educational system is severe individualistic, family, educational as well as the societal problem. The complex process of a student dropping out from a high school at a very young age tends to have adverse impacts on the life of the individual in long run and is influenced by variety of factors. In the recent time, the rate of the drop-out of the students have increased, especially in the developed countries, which have become the source of concern for the high-school. The students spent the most of its time in the school and develop the sense of belonging associated with the school. The concept of sense of belonging refers to the feeling of being accepted and appreciated by the rest of community and group. This makes a person feel as a significant part of the group which provides internal satisfaction to a human. This the nature of every human being, especially youth to get a support and social ties from the society and the community they belong to. The main points in the article are: Family Formation; Civil Engagement; Intergenerational Mobility; The Social Consequences of Dropping Out; Economic consequences; Labor market; Crime; Dropout Prevention programs around the world; Dropout prevention programs in Israel; Role of Quality of Education on Dropout Rate; Impact of sense of belonging on Dropout Rate; School-related Factors and Risk of Dropping; Students’ Perception of Teacher and Dropping out Rate; Students’ Perception of Educational System and Dropping out Rate; Theoretical Framework; Impact of Dropping out on Student’s Life; Steps to reduce the drop-out rate; and Conclusion. Chapter Summary.

Keywords: educational system, dropping out, school students.

1. Introduction

Dropping out from any educational system is severe individualistic, family, educational as well as the societal problem. The complex process of a student dropping out from a high school at a very young age tends to have adverse impacts on the life of the individual in long run and is influenced by variety of factors. In the recent time, the rate of the drop-out of the students have increased, especially in the developed countries, which have become the source of concern for the high-school. The students spent the most of its time in the school and develop the sense of belonging associated with the school. The concept of sense of belonging refers to the feeling of being accepted and appreciated by the rest of community and group. This makes a person feel as a significant part of the group which provides internal satisfaction to a human. This the nature of every human being, especially youth to get a support and social ties from the society and the community they belong to.

Nevertheless, it is a phenomenon that generally takes place within a school and too much extent school factors are responsible and serve as the risk factors. They are numerous factors that lead to the drop-out of the students that primarily depends on the quality of education. Moreover, the factors that are related to the drop-out are the school related or mostly concerned with the teachers that dent the motivation of the students, leading to an increase in rate of drop-out.

This article highlights the rate of the drop out students being observed, with the impact the drop-out have on the lives of the students. In the light of the past the studies, the crux of the article is to highlight the underlying factors that are responsible for the drop-out of the students. Using the relevant theories, the article stresses upon the school related factors that internally pushes the students out of the high-school. The article will end with the necessary steps that have been discussed by the past researcher for the high school, to take in order to control or reduce the drop-out rates.

2. Family formation

Family formation is also one of the consequences of dropouts as they cannot form their own families in terms of getting married. In the light of the study conducted by Caudillo (2019), family formation usually requires higher qualification and financial settlement specifically of the boy. Being a high school dropout, it becomes highly difficult to form a family in terms of not being able to take the responsibility of the child and the spouse. Because of no financial security, it gives a negative impact on the family formation and also towards the society in terms of forming a family and having a settled married life.

3. Civil engagement

Civil engagement is one of those consequences of dropout that is related to making a difference within society. According to the study conducted by Pusztai et al. (2019), dropout individuals become unable to make a change in the society as they get isolated from the society due to the increased level of stress and mental anxieties. Moreover, they ultimately get unable to engage within the society as they feel hesitated to interact with others that leads towards a negative impact on the society. Due to dropping out, these individuals do not get positive vibes from the society and they start spending most of their time alone within an isolated place as they are unable to contribute through their skills and knowledge towards the betterment of the society.

4. Intergenerational mobility

According to the study conducted by Daruich and Kozłowski (2019), intergenerational mobility is defined as the changes within the social position of a family and within its generations. Due to the high ratio of dropouts, this is considered to be one of the important consequences on the society as the future generations also get into this. Moreover, it is also impacting the efficiency of the society in terms of its development through its future generations being socially impacted.

5. The social consequences of dropping out

There are various social consequences of dropping out within a society. Based on the study conducted by Hughes et al. (2017), students who drop out from high schools become a victim of social stigma and also the society starts neglecting those individuals. They get thought that they are completely useless and lose all social and moral support. Moreover, dropping out also impacts

their existence within the society in a negative manner and also impacts the lifestyle of these individuals. These individuals do not get many opportunities in their lives that could be due to the consequence of dropping out from high schools where they always have to face criticism from society.

6. Economic consequences

The outcomes of dropping out on the economy have been described extensively in previous studies. The study conducted by Olivetti and Petrongolo (2017) states that the lack of efficient and skilled human force working in the country could give negative outcomes to the economy. Due to this, individuals being dropouts would not be able to get good jobs and earning opportunities. Moreover, it would increase unemployment and affect the lifestyle and quality of life of people. Economic growth requires a talented and skilled workforce to work in the country that becomes highly difficult with having a high ratio of dropout students from high schools (see Latta & Lowenstein, 2017).

7. Labor market

Labour market highly depends on the availability of the workforce that is highly filled with knowledge and is skilled to join organisations. The increasing number of dropouts could create a lack of efficient candidates as most of them do not have appropriate skills and knowledge required by organisations (see Hanushek et al., 2017) (see Galily, Schwartz & Gurstein, 2019). Moreover, this could also lead towards a higher level of unemployment within the market as most of the dropouts become helpless in terms of not findings suitable growth opportunities and end up doing lower-level jobs (Guio, Choi & Escardibul, 2018). This gives a negative impact on the overall labor market and also a great loss to the organisational sector (see Galily, Schwartz & Gurstein, 2019).

8. Crime

One of the most important consequences of dropping out is increasing ratio of crime within a society. According to the study conducted by Eren, Depew and Barnes (2017), dropouts usually enter into the crime world when they do not get job opportunities and earning opportunities for their survival. In order to earn and feed their families, they are forced to commit crimes and earning money through different illegal ways that include street crimes, robbery and various other major crimes to meet their needs. These things are highly negative for the society that promotes negativity among the society for these individuals.

9. Dropout prevention programs around the world

There are numerous programmes associated to dropout prevention globally that aim to reduce the rate of dropout students. USAID school dropout prevention programme is one of the initiatives taken by the US government in order to reduce the dropout ratio within the country (see School Dropout Prevention, 2015). Moreover, in Netherlands, the government has taken some drastic steps to prevent dropout of students from high schools in terms of offering bus rides to students in order to reach schools and their respective education institutions who face difficulties in reaching to schools (Dropout Prevention, 2015).

Similarly, various countries have launched VET (Vocational Educational and Training) programmes in order to promote vocational education into societies where younger

generations are facing difficulties in getting quality education. It has also been observed that most of the countries have started making changes and modifications within their current education systems in terms of promoting creative learning and making students innovative through their revised syllabus based on the current industrial trends (see Brown, Buttress & Matthews, 2018). Furthermore, school-community collaboration programmes have also been launched globally based on a community advisory committee that guides students in accordance to their career choice. These trends show that there are various programmes launched globally in order to reduce the rate of dropout students from schools and also to provide them quality education so that they could seek good opportunities in their lives.

10. Dropout prevention programs in Israel

There are some dropout prevention programs launched by the government of Israel in order to reduce the dropout rate within high schools and also to persuade students to get education rather than quitting it. The ministry of education has launched Youth Advancement Service that is aimed towards dealing and resolving the social problem faced by young students and also to develop them (see Jewish Virtual Library, 2020). Moreover, this program also contributes in expanding socioeducational treatments for youth in terms of bringing them into the formal education system. Another program is named as HILA whose objective is to help those boys and girls who have quit their education after the eighth standard and working on streets though providing them education opportunities with basic and effective tools of learning (see Jewish Virtual Library, 2020). Moreover, there is another initiative of the Israeli government by the name of ORT Education centers that aims to provide education through their institutions established in the remote areas where access to education is difficult for children (Arkin & Cojocar, 2018). Also, this program aims to enhance the morale of students and to enable towards experiencing a sense of achievement in their lives.

11. Role of quality of education on dropout rate

The quality of education is defined in terms of learning environment in a school and student outcomes. In a broader perspective, quality of education is one of the major goals of the schools which attract most of the students and their parents. The quality of education of the school has also been acknowledged in terms of the positive impact it creates on an individual as well as in the society. The effectiveness and efficiency of the school is directly related with the quality of education it provides. According to the study conducted by Paura and Arhipova (2014) the number of students that graduate from the schools and manage to go to continue further education shows the effectiveness of the school as well as the education system it follows. As per the evaluation of the study conducted by Pavlović et al. (2014) school is considered as the one the most formal places to obtain and acquire education, the quality of the education plays a significant role. Due to these reasons, it can be said that the quality of education plays a significant role in retaining the students which ultimately helps in reducing the dropout among the students. Receiving the education is not sufficient for attaining the sustainable development and success quality of education is a key source that helps students in future to retain what they have learned and implement all the learnt knowledge and concepts practically in their professional career (Drake, 2011). Dissatisfaction of students and parents with the standards of education can result in dropping out of student from high.

The purpose of high schools should be to provide the quality of education to the students as well the positive environment which creates a direct impact on reducing the dropout among students. A good learning and positive environment of the school motivates the students to continue their education. Quality of education is considered to be one of the motivational factors

for the students which directly influence the dropout rate. When the quality of education in high school declines students fails to conceptually understand the content that is being taught to them resulting in disappearance of interest and attention from the class. As per the analysis of Drake, (2011) the quality of education is one of major needs of learning which enriches and flourish the experience of the students. Thus, it can be said there is an important role of quality of education in student's dropout as well as student's retention. The quality of education is necessary for every educational institution the result of which include refreshed and motivated students, active and healthy learning environment, execution of relevant learning material, effective transfer of knowledge and increased engagement. These outcomes of quality education are the major factors of student's retention, In case of failure, the rate of dropout among students can be increased.

12. Impact of sense of belonging on dropout rate

The term sense of belonging refers to the feeling of being accepted and appreciated by the rest of community and group. This makes a person feel as a significant part of the group which provides internal satisfaction to a human. This the nature of every human being, especially youth to get a support and social ties from the society and the community they belong to. Care and support from other makes them strong and encouraged towards their tasks and daily routine which makes their life pleasant and liveable. When it comes to school and education, sense of belonging plays a significant role in student's academic life which provides them a sensation and feeling of safety, security and identity. This sense of belonging encourages students to perform well and helps in their social and physiological development. Studies under this domain represents that the students who feel a part of community of school and feel strongly connected to it tends to perform well in their studies as compare to those who feel left out (see O'Keeffe, 2013). In providing the sense of belonging to high school student quality of teaching plays imperative role in engaging the students in the class and refrain from doing any kind of discrimination among students. Moreover, sense of belonging keeps them motivated towards school and actively take part in all the co-curricular activities. On the other hand, occasionally teachers and educators tend to favour the students on basis academic achievements, grades and intelligence resulting in negligent attitude towards average students that leads them to quit their educational career in mid. Teacher's attitude plays an important in generating the sense of belongings among students (see Drake, 2011).

It has been observed that the sense of belonging results in motivating the students towards their academics as well as towards school which results in reducing the school dropout among high school students. Furthermore, it is evaluated that those students with strong social ties and an enlarged social circle are more connected towards their school and less likely to be a dropout. Sense of belonging is developed and encouraged when teachers and management of the school work hard to make their institution a better place to learn (see Strayhorn, 2018). Practicing family environment within the school premises help the students to get open about their thoughts and converse with teachers and co-fellows which ultimately results in making them feel connected. Furthermore, the practical implication of healthy activities also generates a sense of belonging within the students since it encourages them to participate more which ultimately reduces the risk of dropout among students. The study conducted by Morrow and Ackermann (2012) shows that the sense of belonging among students is considered as the important factor for their retention within the school. It is the essential responsibility of educational institutes to provide the sense of security and engagement to students that can work as a motivation factor for students to regularly attend the school and ensure active participation in academics resulting in low dropout rate.

13. School-related factors and risk of dropping

The students spent a lot of time at the school, thus the context of the school is vital in the personal and social grooming of the high-school students. There are numerous studies that are being directed towards the factors at the school level that are significant towards the dropout phenomenon. As per the study of Charmaraman and Hall (2011), the single factor or event does not contribute in dropping out, but the risk tends to increase when the several factors that are particularly existent, that too for a longer duration of time. As per the study of Yahia, Essid and Rebai (2018), there is a strong influence between the educational performance along with the school infrastructure and the resources that are available in the school.

Moreover the study of Gil et al. (2019) mentions other key factors which plays a contributing role in the dropout of the students such as the size of the school, where many of the students get frustrated and packed due to small, crowded and congested environment, adversely affecting their psychology. Moreover, the teacher-student ratio impacts the mentality of the students. It has been found out through a research conducted by Smeyers (2006), that at most of the occasions, the smaller schools where there are fewer students per teacher are deemed to have a positive impact on the school performance, thus are likely to lead to less dropout rates in the high school. This has been further validated in the study of De Witte et al. (2013), which mentions several characteristics of the schools that plays the decisive role in increasing the dropout rate of the school, that lines up to the school size and school type, the school equipment and the resources, as it psychologically impact the well-being of the student in the high school

One of the important factor in this regard is the classroom organisation, and the school climate in which the students are studying. According to the study of Simić and Krstić (2017), the classroom climate plays a vital role on both the academic achievement and the level of the engagement of students in the school and other extra-curricular activities. Further the students cited in the study that the negative school experiences are one of the strong explanation or justification for the students to drop out, as it was the school climate that unpleasantly impacts by creating a negative influence on the students, by leading to increase the attention deficit, and causing of the behavioural disorders, that are cited to impact the behaviour of the students in long-run.

Moreover, as per the study of De Witte et al. (2013), the schools in which there are limited opportunities for the academic success are viewed as low growth playground for the students, leading to higher growth rate. As stated above as well, one of the strongest mediating factors in school leaving is the lack of the academic success, which leads to the student perceiving school adversely. It has been observed that the students who get low grades, failed to clear the subjects or even fail retain the grades are more likely to leave the school before graduation. Those students who fail to cope up with other students will prefer leaving rather than continuing with the face of frustration. Moreover, the lack of key equal opportunities are viewed from the students' lens as the imbalance created between the academic expectation of the school and resources that are required to fulfil the expectation.

Moreover, the study of Charmaraman and Hall (2011) validated that when the students failed to find the positive relationship in terms of fulfilment of social needs or in other words, there is lack of climate for support and motivation that contribute in increasing the dropout rates. A climate of the shared purpose and the concern are viewed as the key elements in the retaining the students till their graduation.

14. Students' perception of teacher and dropping out rate

One of the significant role in terms of the dropout rate is the student relationship with the teachers and the mediating role played by the teacher in terms of the support granted to the

student which affects the student performance. As per the study of Yazzie-Mintz and McCormick (2012), the teacher support is critical in regard to the student participation in the class, and thus tends to impact the motivation level of the student. The students' perception is influenced by the interest the teacher depicts towards the teaching and learning, which are the critical variables in preventing the students from getting drop out from the school, thus indicating that the motivation is the key to success of the student and prevention of the dropout (see Ning & Downing, 2011).

Moreover, the organizational features that can contribute in the positive social relations include the teacher-student contacts based on the limited number of people in the school premises and much reliance lies on the teacher, to focus on the needs of the students along with their immediate family and the entire community. Moreover, thus much reliance lies on the support and the back the teachers provide throughout the tenure of high school, that encourages the students to keep going, and thus reduces the rate of school dropout (see Yahia, Essid & Rebai, 2018),

As per the study of Bennacer (2000), which was being carried out on 1,123 high school students, it concluded that the teacher has a vital role to play in boosting the academic achievements of the students, by improving the psychosocial conditions in the classroom. Thus the teachers' role in moderating the environment of classroom and improving its psychological conditions is vital for developing the interest of the students. On the contrary, the excessive rules set in the class lead to lower academic performance, thus the classroom environment in which the rules are either strict, unclear or are inconsistent in nature tends to aggravate the dropout risk (see Fortin et al., 2013).

The study of Fortin et al. (2006), indicates that in many high-school it has been observed that teachers' main focus is on the disciplinary interventions and frequent suspensions that lead to lowering the motivation of the students, which in turn increases the drop-out rates among the students. It was found in the study of Simić and Krstić (2017) that the teachers are controlling, uninterested and tends to be unsupportive towards the students, which deleteriously affect the academic performance of the students. Moreover, these teachers tends to worsen the student-teacher relationship, which is a key in development of the students, affecting the performance of the students and persistence in the school.

Moreover, in the light of the study conducted by Jeremić et al. (2012), which was in Serbian context, there were many other factors that were observed from the teachers end. The foremost were the unfair grading system and the lacking experienced in generating the useful feedback on the well-being and the progress of the students. It was coupled with the extensive and insufficient use of the tests and the assessments, along with the formative grading that has led to a significant increase in the demotivation among the students of Serbia. Thus, the teachers need to lower their criteria that should enable the students to pass the classes. The normal mindset found in the school is that they keep the criteria high in the interest of the school, in order to keep high number of students in the high school, to earn more money from them, in return bribe the teachers by preserving their jobs.

Just like this study, most of the studies tend to focus on the school-related factors more than the familial ones, which demonstrate the vital significance for the early school leaving (Lessard, Poirier & Fortin, 2010). Thus, it can be presumed that the dropping out process takes place within the school and different school factors area are assumed the role of risky and protection.

15. Students' perception of educational system and dropping out rate

Education is known as the one of the major need for the development of human beings which helps them to escape from poverty. The national development mainly relies over this along

with the prosperity of the society. The students have a perception that the government is responsible for the education which should be managed by the national resources. Education is regarded as the most important factor for economic as well as social impact in the society. Hence, the government as well as the society have shown a vested interest that makes sure a proper flow of student towards the education. The students of most of the countries travel abroad in order to get quality higher education from the countries that are developing. This mostly takes place in such countries that re in their developing stage. Due to this a large amount of money is spent over education outside the country due to which opportunity is missed by the country which is related to opportunity (see McWhirter, Garcia & Bines, 2018). The quality assurance is regarded as the most important thing which is necessary for the education system according to the students as the first thing that is focused by the students is quality assurance. Quality is known as the fitness for the purpose whereas quality assurance is known as the system, process, action or procedure which is intended for leading towards the achievement, maintenance, monitoring as well as quality enhancement. Student started focusing over the quality assurance which is known as the most important issue for the world in which the collaborations are instigated among the agencies for quality assurance at regional or international level. There are several associations developed in the world that are working in order to ensure the quality of education (see Peguero et al., 2019).

The association of South East Asian Nation has taken several steps in order to assure the quality of higher education in the countries that are situated in southeast of Asia by the ASEAN university network. Another AUN has four basic activities which are exchange of staff as well as students, performing collaborative activities, promoting the ASEAN studies and sharing the information from different sector. Students consider several activities of AUN which are considered as the driving force to assure the quality. These activities include taking the polices for reducing the economic gap in the countries. Along with that making such policies for the countries that are developed in order to internationalise the standard of higher education institutions and exchanging the staff along with transferring the credit. In addition to this it also includes making such policies in order to create a single market (Van Houtte & Demanet, 2016). It is suggested that such activities are designed for increasing the collaboration among different universities which also established the regional economy by which the productivity is improved along with efficiency.

It is investigated that the institutions of education require to ensure a quality of standard of service which helps them to sustain in the market in which they are operating. The institutions are mainly known as the service centres which are similar to profitable and non-profitable organisations that helps in segmentation and targeting the market which depends over the dimensions quality of education. There are several studies that have identified the perception of students regarding the education system (see Gale & Parker, 2017). The study by Ceballos, (2019), have forced that the quality is considered as the most important factor for the students. The credentials of the faculty, the feature of academic as well as support of administration is also considered to be important by them. By using the segmentation, the market of the students is classified in several different groups and with the authorities of the university which can analyse the attractiveness of every segment of the group, it also helps in analysing the promotional efforts.

Students have a perception that the modern universities are doing business, they are experiencing the market of buyers in which the students are going to university in order to buy the education from the end of university through curriculum, library, and faculties along with the resources that are offered. It also consists of the different segments that is required in order to value the propositions (see Zajac & Komendant-Brodowska, 2019). Hence, selection of the appropriate segment is considered to be very important as the students would be considered as the target market which represents the student body which is loyal.

It is observed that as per the students the main factors that are behind the dropping out of the students are linked with the individual characteristic of the student in which the educational performance of the student is included. it also includes the achievement in the

academic platform, persistence as well attainment. The behaviour of the students is another factor in which the engagement of the students, course taking, peers, employment and peers are included. The attitudes of the students are also regarded as the factor that includes motivations, goals, values as well as self-perception.

The background is also regarded as the factor which includes demographics, previous experiences and health. The factors that are linked with the institutional characters are structure, and resources of the school. The family resources and the structures are also regarded as the things that impacts the dropping out of the students (Shrivastava, Janghel & Bhatt, 2016). Another study have focused over the factors that are formulated by the students which are related to the dropping out of students from basic education. These factors includes informal fees from the children, low salary for the teachers, poor health as well as malnutrition for the children as well as overcrowded classrooms, poverty and inadequate facilities for the school and poorly train and qualified teachers are behind the low level of motivation for students which also impacts the dropping out of students (see Herrera, Gloria & Castellanos, 2019).

16. Theoretical framework

The theory that can be relevant in regard to the dropping out of the students is the “pull-out” and “push-out theories”. According to the pull-out theory, the students make a cost-benefit analysis from their economic interests of whether to remain in the school or leave it, to see the benefits by comparing both of the decisions. The pull-out theorists view the students in the contextual sense, where they view schooling as an important part of the lives of the adolescent, along with their family, the labour market, friends and the business organisations. Thus the reasons for pulling the students out of the school are the external factors such as the heavy family responsibilities or the employment opportunities (see Ananga, 2011).

As per the pull-out theorists, in case of the country facing low unemployment rate, there are more chances for the students to leave their school, in order to likely found more jobs. The age group of 16 to 24 are likely to experience high growth in their jobs due to the age factor, attracting pay scale as well. These kinds of jobs are more attractive to these teen workers as compared to the adult. Through their cost benefit analysis, the perceived opportunity cost in studying in the school is generally high, because in such case, they are forgoing their present earning by staying in the school (see Bradley & Renzulli, 2011). The students who fits in the pull-out theorist concentrate more on their family responsibilities, that is to maintain the structure of the family, taking effective care of their siblings and contributing for the likelihood and well-being of the family. Thus the student access the gains and losses, and then decide to leave the school, as there are many important activities awaiting for them such as the job opportunities or the duties related to the family.

The study of Doll, Eslami and Walters (2013), indicates the pull-out factors that are instead of within the student himself such as the financial grievances, need for out-of-school employment, sufficing the family needs, or coping up with the changes in family structure such as marriage, childbirth, that would ultimately lead to pull out the students away from the school. The other reason could be the illness, where the greater value in terms of the opportunity cost is placed to remain outside of the school, thus breaking the flow of the high school education.

On the contrary, there are the push-out theories unlike the pull-out where the existing conditions of the family pulls the students out of the school. The push-out theory are the factors that are related to the school, such as the disciplinary policies and relationship with teachers and other students that eventually lead to push students out of the high school. As per the push-out theory, the focus is entirely on the school factors that lead to discourage the students from continuing with their high-schooling (Stearns & Glennie, 2006). The students in this theory

believes that it is the structure and policies of the school that adversely impact them and rejects them, which creates a negative impact on their behaviour.

The push-out theorist presents the arguments that the students don't leave school based on their individual attributes, but more reliance on the school structure. They define the push effects as the factors that are being located within the school and adversely impact the relevance with the students (see Ananga, 2011). These factors tends to lead the students to reject the context of schooling, where these factors can ranges from being with the school structure, contextual, climate related and can narrow down to being individualistic, and the students as per the push-out theory sees the school as an unwelcoming place.

As per the study of Doll, Eslami and Walters (2013), the study distinguishes between the push and pull factors. The student is ultimately pushed out when there are adverse situations faced within the school environment, that further lead to series of events that finally results in the drop out situations. This can range from tests, attendance, and some of the disciplinary policies that could even account to the poor behaviour. Thus the key difference between the push and pull factors has to be concerned with the difference in agency. Hereby, with the push factor, the agent is the school, where as a result of the consequence, the student is eventually removed from the school. While, on the contrary, it the pull factors are concerned, the student himself is the agent, where the external attractions or the distractions, can bolster the student out of the school. Although there are striking differences in the push and pull factor theory, this study will look in depth the push factors where the school plays the role of the agency and the action is suffered and taken place on the student (see Bradley & Renzulli, 2011).

17. Impact of dropping out on student's life

The decision of choosing not to finish high school is regarded as one of the decision which is consequential which is made by high school students. There are number of students that are drop out of the schools and makes decision in haste and mostly the students are dropped out of the students due to performing unethical activities which they regret lately. It leads to several negative professional as well as personal consequences. The process of dropping out of high school is regarded as a long process of disengagement which has profound economic and social consequences for the students, their families as well as communities. Different countries are facing a crisis for the epidemic proportions that have high percentage of students that are unable to complete their education (see Peguero et al., 2019).

The event of dropping out of student from their educational institution is considered as major life event of the students that majorly impacts the chances of students over subsequent educational as well as occupational opportunities. It is indicated that one-third of the students that have entered high school and did not able to graduate on their time. It is estimated that there are more than 7000 students that have been dropped out of high school daily which means every one person out of three people are facing dropped out (see Gale & Parker, 2017). The students are regarded as the future of their countries and also they are referred as the greatest resource. Every children deserve such education that helps them for preparing to become productive members of the society so that they are able to perform their economic as well as civic duties. As such, it is ensured that they have opportunity for succeeding. The individual of the country or the city will get the benefits from the citizens that are educated (see McWhirter, Garcia & Bines, 2018). Therefore, by this the interest that is of everyone would be served by ensuring that the students should get proper education in educational institutions.

It is analysed for most of the students, graduating from high school is considered as the minimum standard that they have achieved in order to lead a successful life. The diploma that is achieved by the person from high school would help the people to embark over the variety of the

pathways for career, personal as well as social success which is normally not available to the students that are dropped out of high school. There is an extremely serious plight for the dropouts of the school, college or university which is considered to be extremely serious. If the students are dropped out there are very less chances that students are able to secure a proper position in their profession.

The people face increasingly bleak career prospects without having a diploma that is mainly tied with the entry-level employment. They remain very behind in this age that is driven by the technology in which career adaptability is not a plus point but it is referred as one of the major requirement (see Shrivastava, Janghel & Bhatt, 2016).

The rate of graduation are considered as an important indication which shows the performance of the students. Such rates are meticulously examined which also divulges the extent for the tragedy in most of the schools. Most of the schools publish wrong graduation rates in order to save their mangle but the people are aware of the problem that are faced by most of the high schools of the nation. There are several factors that are considered to be very important in dropping out of students from their respective degree in which poverty, low rate of literacy as well as parenting responsibility, level of achievements and the requirement of earning the money by the employment so that the students are able to contribute in financial terms that also helps in improving the families (see Zajac & Komendant-Brodowska, 2019).

The majority of the students that are unable to complete their degrees from the high school along with the graduating class mainly consists of Hispanics, Blacks as well as the native people of their country. Most of the students are forced to leave their schools in two years of the graduation date which is projected. The tragic cycle is not regarded to be substantially improved from several past decades and in which several reforms of education are regarded to be high over the public agenda. Within this time, the politicians as well as other officials that are elected purports for working in order to mitigate the high percentage for the students that are dropout (see Herrera, Gloria & Castellanos, 2019). The general public is not aware of the severity of the problem that are faced by the dropouts which are mainly due to the inaccurate as well as inconsistent data and there are tragic consequences of this.

18. Steps to reduce the dropout rate

There are several programs and strategies that are used in order to reduce the ratio of dropout. A number of proposed solutions are recommended for combating the problem that is related to the dropout of high school which also deals with the social issues that are encountered by the teenagers on daily basis. The solution mainly target at risk by the youth which ensures that they have necessary tools and guidance for successfully completing the education. There are different interventions that are used in early age in which it is advocated that working with the children at very young age helps in teaching the importance of staying in the schools (see Chakraborty & Chaudhuri, 2019). The schools led the way for the development of the programs that are effective for the students. These programs are pioneered from third standard. By building strong as well as stable school environment, it is very important factor for the development of the proper programs for the children that needs specific attention (see Jia, Konold & Cornell, 2016). It is very important for starting the essential elements for the sound environment of school environment, beginning with the organisation of the administration and ends with the culture of school.

It is investigated that alternative programs for education would help the students that are dropped out of the high schools. There are some students for which the traditional high schools or educational institution do not work. The teenagers that have to support their family as well as their education. For such students going school in the day is not considered to be feasible (see

Andersson & Kroisandt, 2019). Thus this idea is introduced in which alternative schools are formed. Furthermore, the dropout prevention programs are considered as an effective strategy that helps the students that are dropped out of the educational institutes. Under this there are several strategies that are being provided to the communities, families as well as districts of the school for continuing their education. The resources are provided in the form of strategies and the strategies that goes with the problems of the students are provided to them (see Sivakumar, Venkataraman & Selvaraj, 2016). This strategy provides the school districts with the alternative strategies like unique teaching techniques, procedures for assessment and learning activities. In Israel, most of the students are dropped out of their high schools due to the lack of confidence. For this the education ministry of Israel introduced unique as well as accelerated approach for learning which is pioneered by the Yeholot association which is regarded as the subsidiary for of the Rashi foundation which is initiated in the year of 2009. Due to this there is dramatic rise in the rates of matriculation which has spurred the continuity of the programs which now provides 6,000 people schools as well as confidence along with the potential tools which helps in decreasing the rate of dropping out students (Bradley & Renzulli, 2011).

19. Conclusion. Chapter summary

The literature that is related to the impact of quality of education as well as sense of belonging on the risk of high school students dropping out is included in this chapter. The concept of student dropout is included in this chapter. A student is considered to be a dropout if he/she fell into one of the following categories; first, students who withdrew from the system to join the workforce, the military, or due to pregnancy or were needed to assist at home. Some students provide this kind of information about their plans for the future. Second, students who were removed from the school system for non-attendance but they did not formally withdraw from school. The rate of dropping out among the students of high school is also discussed in the chapter. It is analysed from the chapter that dropout rate is the percentage of students failing to complete the education or leaving their schools/colleges without acquiring the complete education. Currently, the dropout rate among the students is one in three. The several reasons for the dropout in high school is also discussed and the main reasons that are listed are academic failure, expensive tuition fees, the environment of the school which is discouraging and the mental illness. In addition to this the role of quality education in the rate of dropout students is also discussed along with the impact of sense of belonging over the dropout rate. This sense of belonging encourages students to perform well and helps in their social and physiological development. Studies under this domain represents that the students who feel a part of community of school and feel strongly connected to it tends to perform well in their studies as compare to those who feel left out. The school related factors as well as the risk of dropping out is discussed in the chapter along with the perception of students over teachers in dropping out and the perception of students over educational system. The steps and programs that are used in order to reduce the dropout rate is also briefly explained in this chapter.

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Exploring the Psychological Risk Factors in Children with Epilepsy

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Abstract

There are many factors that aggravate the clinical picture of children diagnosed with epilepsy. Through this study we will explore risk factors related to disease characteristics, cognitive impairments, intelligence and behavioral problems in children with epilepsy. **Methods:** Based on the medical data of children diagnosed with epilepsy being treated at the Pediatric Neurology Unit, University Hospital of Pristina, and the “Hope” Psychological Outpatient Center in Kosovo, about 100 epileptic children, 55 female and 45 male, aged between 6 and 11 years of school age were administered the Montreal Cognitive Assessment scale (MoCA), Raven’s Standard Progressive Matrices (IQ), and Child Behavior Checklist (CBCL) tests. **Results:** Children participating in the study reveals a predomination of the generalized epilepsy, which continue to be treated with anti-epileptics for more than 3 years. From them 67% did not show the presence of another co-neurological deficit. Neurological tests show evidences of moderate EEG changes in some children and MRI registrations in 65% of children are unchanged and continue to be treated with 1 or 2 antiepileptic drugs for being under control. Intelligence, cognitive and behavioral problems in cases where they were associated with a number of neuropsychological characteristics increase the risk of a disease aggravation and compromise their overall development. **Discussion:** We can imply that based on the severity of these concomitant factors of the epileptic conditions, they will constitute a high-risk factor for cognitive problems, low intelligence and the emergence of a number of internalizing and externalizing problems of the child with epilepsy. **Conclusions:** As a risk factor that increases the level of difficulty of epileptic children in some contexts, including general functioning, school, family and social context, the presence of neurobiological and neuropsychological factors such as issues in internalizing and externalizing behaviors, problems in the cognitive field and the IQ are seen, which is also expected to affect the overall development of children’s quality of life.

Keywords: Epilepsy, children, cognitive impairments, general intelligence, behavioral problems, EEG, MRI.

1. Introduction

Epilepsy is a common neurological disorder in which abnormal electrical discharges from the brain cause recurrent seizures (Paudel, Shaikh, Chakraborti, Kumari & Aledo-Serrano et al., 2018). Both types of epileptic seizures refer to partial seizures that begin in an area of the brain and generalized seizures that begin in both cerebral hemispheres simultaneously. A study by Reddy and colleagues (Reddy, Younus, Sridhar & Reddy, 2019) found that epilepsy as one of the most complex brain disorders was associated with spontaneous damage as a result of abnormal electrical discharge in the brain and that about 40% of children diagnosed with epilepsy appear to have lesions that cannot be treated with antiepileptic drugs. In cases when generalized and partial-type epilepsy are associated with symptoms of synaptic failure (Joy & Fields, 2019), neurological damage, or manifestation characterized by a hyperexcitability of indefinite duration (Hirosawa, Kikuchi, Fukai, Hino & Kitamura et al., 2018), it may lead to a clinical manifestation of the chronic stage (Kynast, Lampe, Luck, Frisch & Arelin et al., 2018). According to Reddy the variety of antiepileptic drugs, however, does not help a part of epileptic patients (Izadi, Ondek, Schedlbauer, Keselman, Shahlaie & Gurkoff, 2018) who present a form of epilepsy which fails to be fully traced in its clinical symptomatology based on the type of damage it causes (Reilly, Atkinson, Memon, Jones & Dabydeen et al., 2018) and the area in which it lies in the brain (Jones, Asato, Brown, Doss & Felton et al., 2020; Burke, Naseh, Rodriguez, Burgess & Loewenstein, 2019; Noebels, 2015). In most cases what pharmacological treatments do (Cacabelos, 2020; Mollon, Mathias, Knowles, Rodrigue & Koenis et al., 2020; Williams, 2020) is the symptomatic treatment of the concerns of the epileptic patient, who is only able to control the severity of the injury but gives little opportunity to keep the disease under control (Holmes, 2014).

Cognitive impairments (Wang, Chen, Liu, Lin & Huang, 2020) are typically associated with epileptic seizures with apparent impairment (Wang, Liu, Liu, Zhang & Wang et al., 2020) and frequent seizures (Hessen, Alfstad, Torgersen & Lossius, 2018). But not in all cases epilepsy is associated with cognitive impairments (Hermann, Loring & Wilson, 2017; Zhou, Chen, Peng & Ouyang, 2016; Galanopoulou, & Moshé, 2015). However, there are some conditions that tend to worsen the clinical picture of children diagnosed with epilepsy and compromise not only the course of treatment during the course of the disease (Ravizza, Onat, Brooks-Kayal, Depaulis & Galanopoulou et al., 2017) but also to be the cause of children struggle with a series of difficulties throughout development stages (Abstracts from the 51st European Society of Human Genetics Conference: Posters, 2019) and slow down life in young patients (E-Poster Viewing, 2019). Cognitive impairments are seen as a risk factor for epilepsy with an early onset and long-term consequences for brain development (E-Poster Viewing, 2019; Makale, McDonald, Hattangadi-Gluth & Kesari, 2017; Jacobs, Willment & Sarkis, 2019; Greenberg & Subaran, 2011; Brooks-Kayal, Bath, Berg, Galanopoulou & Holmes et al., 2013) especially due to the negative effects that result in the neurodevelopmental (Perry, Lacritz, Roebuck-Spencer, Silver & Denney et al., 2018) and psychosocial (Semple, Zamani, Rayner, Shultz & Jones, 2019) path of the epileptic child. If we refer to the causes that lead to the diagnosis of this disease, studies of the last two decades acknowledge that causes are multifactorial such as the type of epilepsy (Kalara, Akinyemi & Ihara, 2016), the etiology of its outbreak (Lenck-Santini & Scott, 2015), the age of onset (Korthauer, Awe, Frahmand & Driscoll, 2018; Hamed, 2009), the frequency of seizures (Yoong, 2015), duration of the disease (Greaves, Psaltis, Ross, Davis & Smith et al., 2019) and its treatment (Holmes, 2016; Vinciguerra, Graziano, Hagnäs, Frittitta & Tumminia, 2020). In their research Kim and Ko (2016) acknowledges that cognitive impairments will depend on the link between pre-existing cognitive concerns in children before the onset of the crisis and the structural-functional changes in the brain (MRI) during the onset of the disease. It is precisely this common neurobiological mechanism (Pardo, Nabbout & Galanopoulou, 2014) that connects epilepsy with cognitive

comorbidity. Referring to the findings investigating the link between IQ and epilepsy, it is revealed that low intelligence is related to the type of deficit and the frequency of epileptic seizures (Ping, Qin, Liu, Lu & Zhao et al., 2019). So, children with a long history of epileptic seizures and with an active epilepsy, are considered a vulnerable group to cognitive issues, intelligence compromise and behavioral problems (Crudgington, Rogers, Morris, Gringras, Pal & Morris, 2020). Children with a severe neurological deficit tend to show compromised levels of intelligence. However, referring to the influence of risk factors in the progression of the disease and into of cognitive issues, the relationship is not all clearly defined by field studies. Based on the different results, the relationship between epilepsy and risk factors should be seen from the context of the impact of dysfunction on a wider range and under the influence of the severity of epileptic seizures.

2. Methods

The sample of the current study (N = 100) are school-age children between the 6-11 years old who receive treatment at the University Clinical Center of Kosovo, Department of Neurology and Pediatrics in Pristina, Kosovo. This sample is composed by 55% girls and 45% boys, from whom 14% attend first grade, 14% of attend the second grade, 26% are in the third grade, 18% in fourth grade, 18% in fifth grade and 10% of the children diagnosed with epilepsy are in the sixth grade. Medical data include demographic factors, duration of antiepileptic treatment (from 1 to more than 3 years), type of epileptic seizure (generalized, partial and mixed), electroencephalography (EEG of TEG 1.5), neuroimaging MRI) as well as the presence of comorbid neurological deficits have been reviewed retrospectively. Participants were assessed for the presence of cognitive impairments through the Montreal Cognitive Assessment scale (MoCA) to identify the presence of mild cognitive impairments such in the attention and concentration, executive functions, memory, speech/language, visual-spatial skills, abstractive thought, accounting and orientation. Fluid and crystallized intelligences was assessed with Raven's Standard Progressive Matrices (IQ), a nonverbal test for measuring the general IQ in children who have normal development in cognitive and motor functions, starting from lighter issues and gradually raising its difficulty. Behavioral issues were measured through the Child Behavior Checklist (CBCL) to identify behavioral issues in children. The school version (CBCL) is designed for children ages 6 to 18 years old. The answers are evidenced in Likert scale: 0 = Not true, 1 = Somehow or sometimes true, 2 = Very often or often true. It consists of 120 questions. Five participants were excluded as a result of serious cognitive impairments. All parents signed an informed consent contract to give the consent of their children to participate in the study.

3. Statistical analyses

Statistical analyzes were performed through the SPSS statistical program, version 20.0. Data are presented as the mean of the standard deviation or as percentiles (%). Continuous variables were compared with the T test or variance analysis (ANOVA) and discrete data with the χ^2 test. Correlations were tested with Pearson coefficients. Significant difference will be defined as $p < 0.05$. Since all research variables were three-level (e.g., the type of panic attack: generalized, 2. partial, mixed), then ANOVA was used. It enabled the comparison of the averages for each group and for checking the correlations between the variables of this research and to reconfirm the findings.

4. Results

Results reveal a statistically significant relationship between the frequency level of global cognitive development and the global IQ. The statistical significance (Sig. 2-tailed) value for

the level of cognitive development (MoCA) and coefficient level of intelligence (IQ) <0.05 , the relationship between the level of cognitive development associated with the IQ is not random, but statistically significant. “Pearson” ($r = .300$ for cognitive development) is: Sig (2 Tailed) $p = 0.01 <0.05$. First, this value is positive, which means that there is a positive correlation between variables (cognitive development and IQ). So, there is a statistically significant relationship between the level of cognitive development and the IQ.

As the level of cognitive development in children with epilepsy increases, so does their IQ. The more cognitive problems children with epilepsy have, the lower their IQ. The fewer cognitive problems children have, the higher the level of cognitive development, the higher the level of IQ. Based on the correlational analysis there is an important statistical relationship between the frequency of the global scale of behavioral problems and the global scale of the IQ. The value of statistical significance Sig. (2 tailed) $p = 0.01 <0.05$, the relationship between behavioral problems (CBCL) and IQ is statistically significant, $r = 0.661$, so the relationship between the two variables is strong and positive as values for behavioral problems increase, so do the values for the IQ of children. In conclusion, there is a significant statistical relationship between the lack of problems in the behavior of children with epilepsy and the average frequency of their IQ. As values increase for lack of behavioral issues, their IQ increases and this is a strong statistical relationship.

Table 1. Correlation between cognitive problems (MoCA) and the total mean of the Intellectual Coefficient (IQ) and behavioral problems (CBCL)

	Total	Moca	IQ	CBCL
Total				
Moca		-		
IQ		.300**	-	
CBCL		.192	.661**	-

****.** Correlation is significant at the 0.01 level (2-tailed).

The relationship between cognitive development and IQ in children with epilepsy Sig. (2 tailed) $p = 0.01 <0.05$, $r = .300$ is positive and moderate. The higher the cognitive development of children with epilepsy, the higher the level of their IQ. While the relationship between behavioral problems and IQ in children with epilepsy is Sig. (2 tailed) $p = 0.01 <0.05$, $r = .661$, the relationship is positive and strong. The higher the level of lack of behavioral problems, the higher the level of intelligence of children with epilepsy. It results that the relationship between the duration of therapeutic treatment and the type of attack (Sig. (2 tailed) $p = 0.01 <0.05$, $r = .284$) is positive and moderate. The greater the duration over the years in therapeutic treatment within health and rehabilitation centers for children with epilepsy, the more noted will be the type of epileptic seizure. The relationship between neurological deficit type and cognitive development (MoCA) (Sig. (2 tailed) $p = 0.01 <0.05$, $r = -.469$) is negative and of moderate severity. The more severe the type of neurological deficit, the more issues will emerge in the cognitive development of children with epilepsy. The relationship between neurological deficit type and IQ (Sig. (2 tailed) $p = 0.01 <0.05$, $r = -.666$) is negative and strong. The more severe the type of neurological deficit in children with epilepsy, the lower the IQ. The relationship between neurological deficit type and behavioral issues (CBCL) (Sig. (2 tailed) $p = 0.01 <0.05$, $r = -.461$) is negative and of moderate severity. The more severe the type of neurological deficit, the lower the score for behavioral issues in children with epilepsy. The relationship between EEG registration values and the type of epileptic seizure (Sig. (2 tailed) $p = 0.01 <0.05$, $r = .835$) is positive and of significant strength. The lighter the EEG values recorded in children with epilepsy, the easier the type of epileptic seizure will be. The relationship between EEG records values and duration of treatment (Sig. (2

tailed) $p = 0.01 < 0.05$, $r = .366$) is positive and of moderate severity. The higher the values recorded in the EEG in children with epilepsy, the longer the duration of treatment with therapy. The relationship between structural changes in MRI and cognitive development (Sig. (2 tailed) $p = 0.01 < 0.05$, $r = -.472$) is negative and of moderate severity. The greater the structural changes in MRI in children with epilepsy, the lower their cognitive development. The relationship between structural changes in MRI and IQ (Sig. (2 tailed) $p = 0.01 < 0.05$, $r = -.560$) is statistically negative and strong.

The greater the structural changes in MRI in children with epilepsy, the lower their IQ. The relationship between structural changes in MRI and behavioral problems (CBCL) (Sig. (2 tailed) $p = 0.01 < 0.05$, $r = -.454$) is negative and of moderate severity. The greater the structural changes in MRI in children with epilepsy, the lower the behavioral issues. The relationship between structural changes in MRI and the type of neurological deficit (Sig. (2 tailed) $p = 0.01 < 0.05$, $r = .860$) is positive and stronger. The greater the structural changes in MRI in children with epilepsy, the more severe the type of neurological deficit that appears in them. The relationship between the number of epileptic seizures and the type of epileptic seizure (Sig. (2 tailed) $p = 0.01 < 0.05$, $r = .884$) is positive and fairly strong. The greater the number of epileptic seizures in children with epilepsy, the more severe the type of epileptic seizure that associates this disorder.

The relationship between the number of epileptic seizures and the duration of treatment (Sig. (2 tailed) $p = 0.05 < 0.05$, $r = .255$) is positive and weak. The greater the number of epileptic seizures in children with epilepsy, the longer the duration of therapy followed by them. The relationship between the number of epileptic seizures and the record value in EEG (Sig. (2 tailed) $p = 0.01 < 0.05$, $r = .860$) is positive and quite strong. The higher the number of epileptic seizures in children with epilepsy, the higher the EEG recorded values.

Table 2. Correlation graphs of the MoCA, IQ, CBCL global scales and the type of epileptic attack, duration of treatment, neurologic deficit, EEG records, structural changes in MRI and the quantity of epileptic attacks in children with epilepsy (N=100)

	1	2	3	4	5	6	7	8	9
1. Moca Total	-								
2. IQ	.300**	-							
3. CBCL	.192	.661**	-						
4. Type of epileptic attack	-.158	-.080	-.074	-					
5. Duration of treatment	.007	-.087	-.053	.284**	-				
6. Neurologic Deficit	-.469**	-.666**	-.461**	.190	.167	-			
7. EEG recording	-.111	-.066	-.066	.835**	.366**	.023	-		
8. Structural changes in MRI	-.472**	-.560**	-.454**	.209*	.068	.860**	.030	-	
9. Number of epileptic attacks	-.161	-.167	-.132	.884**	.255*	.174	.833**	.150	-

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

5. Discussion

Based on the results of the duration of drug treatment, findings show that most children have a long period of follow-up in therapy for more than 3 years at the Center for Pediatric Neurology and at the "Hope" center. They are followed by the group of children who have a follow-up from 1 to 3 years and then, there is a small percentage of children who are treated for less than a year. Referring to the forms of therapy that are applied in these centers, there is a combination between treatment that aims at medical intervention through antiepileptics and the psychological intervention (Crudgington, Rogers, Morris, Gringras & Pal et al., 2020) through neurodevelopmental therapy for children with epilepsy who have compromised this aspect of their functioning. Regardless of the type of neurodevelopmental impairment and therapeutic intervention taken by patients with epilepsy, an ongoing assessment process is performed for all children who have been diagnosed and followed up at these centers. Based on the timely scope of treatment, referring also to the findings from other studies, there are contradictory data that medical or psychological treatment (French Intensive Care Society International Congress, 2020) have on the prognosis of children in the long-term perspective (Bulaj, Ahern, Kuhn, Judkins & Bowen et al., 2016). Groups of researchers have acknowledged that new antiepileptic drugs do not show clinical evidence on their efficacy in long-term use in the treatment of children with epilepsy. Research (Bulaj, Ahern, Kuhn, Judkins & Bowen et al., 2016; Aliyu, Abdullahi, Iliyasu, Salihu & Adamu et al., 2019) was conducted on the effects on the long-term plan based on numerous studies mainly in pediatric ages. They have concluded that the data are insufficient to balance the risk and benefits (Aliyu, Abdullahi, Iliyasu, Salihu & Adamu et al., 2019) that the child has in the long term medical treatment or influenced by social factors such as the income available to the family and the state to support the structures with technology contemporary to make an adequate diagnosis of children. This finding should prompt us to reflect on the consequences of side effects associated with the use of antiepileptic drugs (Suraev, Lintzeris, Stuart, Kevin & Blackburn et al., 2018; Aicua-Rapun, André & Novy, 2019) to treat epilepsy for a long period of time and on the impact, it may have in terms of compromising in different areas along the normal course of development of the child (Dugger, Platt & Goldstein, 2018). Referring to the conclusions of O'Brien and colleagues (O'Brien, Clapham, Krysiak, Batchelor & Field et al., 2019) it is a necessity to consider the age factor to determine the dosage forms that must first be focused and give priority to the safety and acceptability of the child, which are consistent with his or her development and skills and to avoid the wrong treatment that comes from the development of inappropriate formulations. However, based on the results of the study participants, we have no evidence to show a negative impact of drug treatment for a long time in the field of behavior, issues with cognitive functioning or the presence of association of this variable with a low IQ. Mostly children with epilepsy who are treated with pharmacological therapy for more than 3 years do not have any association with other neurological damage and also did not show any implications for increasing the level of behavioral issues compared to the group of children receiving therapy for a shorter time. In terms of various aspects related to cognitive development and IQ, there is no connection between these two variables, i.e. the duration of follow-up with therapy and problems or their improvement compared to children receiving this treatment for a shorter time.

Referring to our findings, it is revealed that in the majority of children participating in the study, another neurological deficit with epilepsy disorder is not associated. This evidence allows us to predict that the prognosis of children who do not have another concomitant epilepsy impairment will be positive and will not be the cause for onset throughout the course of developmental problems in cognitive functioning, behavior and IQ. At low levels, the presence of a mild and moderate deficit appears.

These results give us the opportunity to argue that by referring to the severity of the symptoms shown in relation to the presence of other neurological impairments in children participating in the study, we will inevitably have problems with their cognitive development and

IQ. Epileptic children without neurological deficits, who make up the largest number of participants, will inevitably present problems at serious levels in terms of attention, visual-spatial executive skills, short-term memory, spoken language, abstract thinking, etc. time and space orientation. This means that children meet all the conditions for normal development in terms of fulfilling their duties related to self-care, school, family and social interaction with peers and adults in normal developmental context. A small number of children diagnosed with epilepsy have an association by the presence of a mild and moderate deficiencies, which seem to have an impact on the field of cognitive and behavioral development of children, thus increasing the probability for a more complex prognosis which requires the follow of medical and psychological treatment as necessary. As a form that facilitates the global functioning of the child in all areas of life and increases the possibility of a normal course of formative itineraries related to tasks in the school context and personal development, early intervention is considered a strong element, but in this context, it is important to consider competent assessment of appropriate forms of drug intervention if necessary, considering the chronological age and cognitive development of the child. Based on the findings of other studies (Chang, Krishnan, Dulla, Jette & Marsh et al., 2020) it is revealed that epilepsy is associated with a number of neuropsychiatric and somatic problems which have a major impact on the continuity of treatment. Chang and colleagues argue that the lack of a neurological deficit reduces the risks of appearing in the clinical view of epilepsy other complications such as problems in the child's cognitive and behavioral development. Recent technological developments have helped us better understand the causal role of genes responsible for various types of epilepsy (Coryell, Gaillard, Shellhaas, Grinspan & Wirrell et al., 2018), but it is still unclear how their impact will determine the severity of symptoms from one individual to another. These data shall be considered by the medical staff in order to increase vigilance and extend the time required for a careful diagnosis and appropriate to symptomatology (Silvestro, Mammana, Cavalli, Bramanti & Mazzon, 2019) and its typology to each patient. This approach combined with professional competence allows us to build a successful long-term intervention plan for all of our young patients diagnosed with epilepsy. An interesting finding that requires attention in this discussion is related to the number of antiepileptic drugs as the form through which these children are treated during the course of epilepsy disorder. The pharmacological treatment followed in our case demonstrates that all children participating in the study are treated with pharmacological therapy. Referring to the above evidence, it is revealed that a good part of these children is diagnosed with epilepsy but without neurological deficits (about 67% of children), compared to those who receive pharmacological treatment for more than 3 years (about 62% of children) and without changes in MRI (about 65% of children). We have a relatively large number of children who are treated with an antiepileptic medical (drug) or with two medications combined together. There were also children who take more than two medications to treat epileptic symptoms.

It is considered unclear, although outside our professional expertise, the increased number of drugs that these children are treated with. This finding is related to the above-mentioned evidences which present us with a picture without obvious compromises referring to the severity of the symptoms and the lack of association of epilepsy with other neurological problems. This evidence that the study highlighted aims to draw attention to the encouragement of a reflection on the long-term consequences that taking these medications may have on the child's developmental process and the possible side effects of their prolonged use. Based on studies (Panebianco, Al-Bachari, Weston, Hutton & Marson, 2018; Nevitt, Sudell, Weston, Tudur Smith & Marson, 2017) on the effects of antiepileptic drugs, researchers agree that certain conditions related to administration of antiepileptic drugs to school-age children should be carefully considered. These conditions suggest a reduced number of medications at young ages and a careful evaluation of side effects and long-term impact on child development (de Bruijn, van Sonderen, van Coevorden-Hameete, Bastiaansen & Schreurs et al., 2019). The use of medication should be considered necessary only for those children who are at a pronounced level of neurological

impairment (Fleming, Fitton, Steiner, McLay & Clark et al., 2019). Referring to the use of various research drugs (de Bruijn, van Sonderen, van Coevorden-Hameete, Bastiaansen & Schreurs et al., 2019; Grinspan, Shellhaas, Coryell, Sullivan & Wirrell et al., 2018; Kaushik, Chopra, Sharma & Aneja, 2019), it's important to assess new and old medications in school ages based on the impact they may have on long-term perspective (McTague, Martland & Appleton, 2018). Problems with internalizing and externalizing behaviors tend to increase in the group of children who have epileptic comorbidities with a moderate and severe deficit compared to the group of children without deficit or mild impaired. The presence of a moderate and severe neurological deficit appears to increase the difficulty of children in terms of overall functioning in the school, family and social context. This result is also accepted by research (Dabbs et al., 2013; Shinner et al., 2017; Munger et al., 2018) where rather the increase of behavioral problems is dedicated to the combination of several factors, among which the association of a neurological deficit has a negative impact on the child's life. So, we can imply that based on the so far evidence some of the antiepileptic drugs used to keep epileptic seizures under control seem to be associated with a higher risk than others (Boshuisen, Lamberink, van Schooneveld, Cross & Arzimanoglou et al., 2015). Here it can be included clobazam, clonazepam, levetiracetam, perampanel, phenobarbital, tiagabine, topiramate, vigabatrina, and zonisamiden. The highest probability of developing aggressive behaviors should be explained to any patient who begins treatment with any of these medications, especially for those children who have had previous history of anger management issues (Berg, Zelko, Levy & Testa, 2012). Among antiepileptic drugs, there is strong evidence of a risk of aggressive behavior for levetiracetam, perampanel and possibly topiramate, but most children taking these or other medications will not have problems with aggressive behaviors (Andresen, Ramirez, Kim, Dorfman & Haut et al., 2014). Parental involvement in discussing the determination of selected drugs for the child is significant, as they recognize and can provide information on the temperament and previous aggressive behaviors of children with epilepsy. These issues should be considered when choosing pharmacological therapy for all patients with newly diagnosed or chronic epilepsy. Regarding the presence of internalizing and externalizing issues in the behavior of children with epilepsy, it seems that the factors that promote aggravation of problems in this area are related to the type of moderate or severe neurological deficit with structural changes recorded in MRI, which likely make it difficult for the child to progress in his\her developmental process and interfere in a number of important areas causing problems such as the child's performance in school and overall psychological well-being by encouraging the child to cope with anxiety, depression or anger management problems and aggression. But in terms of social functioning it seems that children who show the presence of a severe neurological deficit and marked structural changes in MRI will have a number of problems in relation to how they will build relationships with others significant to them, but also with others, with whom the child is obliged to interact in different contexts. It seems that in fact the severity of behavioral issues in children with epilepsy will depend on how the disease will find or not find the favorable path for progress or regression under the influence of a number of factors such as the severity of panic attacks, the duration of the attacks. Epileptic seizure, their quantity, neurological deficits and structural changes and damages in areas of the brain, the child's intelligence and behavioral problems are seen as predominant to the degree of problems and directly affect the cognitive aspects. The type of epileptic seizure appears to be strongly influenced by changes in the brain's electrical waves recorded on the EEG, the duration of treatment, structural changes in MRI and the number of epileptic seizures. Referring to studies (Kossoff, Zupec-Kania, Auvin, Ballaban-Gil & Christina Bergqvist et al., 2018) it is also revealed that depending on the type of generalized epileptic seizure, associated with a longer duration of treatment with antiepileptics, it is worth noting that even the number of antiepileptics that the child takes has a negative impact on congenital and behavioral development if given for a very long time. Children with epilepsy tend to have a more aggravated picture of problems in terms of cognitive functioning, intelligence and behavioral problems if the epileptic seizure is generalized, mixed (partial/generalized) compared to the partial one. Epileptic children depending on the type of epileptic seizure attack will trigger

the need for a therapeutic intervention which considers the presence of a generalized or mixed attack, the duration of treatment, the recording of electrical waves in the EEG and the number of epileptic attacks. These factors have a direct impact on how the child will cope with the disease and how it will adapt to the tasks and responsibilities related to his\her age.

In conclusion we can imply that based on the severity of these concomitant factors of the epileptic conditions, they will constitute a high-risk factor for cognitive problems, low intelligence and the emergence of a number of internalizing and externalizing problems of the child with epilepsy. The study also noted that the duration of treatment will be affected by the level of changes in the brain's electrical waves recorded on the EEG and the number of epileptic seizures, while the neurological deficit that associates epilepsy will depend on structural changes recorded on MRI. The changes in EEG-recorded waves will depend on the number of epileptic seizures. Referring to findings of the study which are also confirmed by other research (Zelko, Pardoe, Blackstone, Jackson & Berg, 2014) we can acknowledge the superiority of biological factors over other psycho-social factors in determining the severity of symptoms of the occurrence of epilepsy in children.

6. Conclusion

In conclusion, we can refer that fact that the child is diagnosed with epilepsy whether it is an only one does not constitute a condition for having cognitive and behavioral problems in the long term. But a combination of several factors increases the risk of dealing with an epileptic child with a range of cognitive and behavioral issues that will severely impair the progress of his or her development and their quality of life in the overall view. Children diagnosed with epilepsy who have received insufficient and inappropriate education, with frequent epileptic seizures, generalized type seizures, with longer time duration, who have problems with depression, who have started treatment with antiepileptics very early and treated with more than one antiepileptic, summarize that all those significant factors that constitute favorable conditions for the development of congenital problems. Under the influence of a severe neurological deficit, marked changes in the electrical waves of the brain recorded on the EEG and with data on marked changes on MRI, accompanied by a number of frequent epileptic seizures, also constitute the path for clinical picture with aggravated symptoms in cognitive functions, with a deep compromise of the IQ and with aggravated levels of problems in the internalizing and externalizing behaviors of children with epilepsy. Risk factors related to the interaction of psychological and biological factors favor the ground for compromising the child's cognitive development and interfere in the course of the epileptic disease.

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Preliminary Study of Subjective Well Being in Adolescents: Qualitative Survey Analysis

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Abstract

The subjective well-being on this study concerned on adolescents' self-reported assessments of their own subjective well-being. It is an issue of concern of students. This study aims to examine the level of subjective well-being among students. We performed this descriptive study in Jakarta, from January to February 2020. This research was conducted on 134 teenagers aged 17 to 18 years living in Jakarta. There were 115 (85.8%) women and 19 (14.2%) men. In this study, adolescents' view about their subjective well-being were gathered through open-ended questions. This study uses qualitative mixed method design. The form consists of three open-ended questions pertaining to views of adolescents regarding the concept of well-being. The answers are then combined and collected under the general header. Data analysis uses MAXQDA analysis tools to develop thematic coding and take the highest frequency. The results found that adolescents' opinions about subjective well-being include: productivity, positive emotion, social oriented, need satisfaction, minor challenges, health, religiosity, and independent.

Keywords: subjective well-being, thematic coding, adolescents.

1. Introduction

Positive psychology aims to change the perspective of psychology that tends to be negative and only improve the worst, into a perspective that can build positive qualities in life (Seligman & Csikzentmihalyi, 2000). Personal traits' components of positive psychology include happiness, optimism, subjective well-being, and self-determination (Seligman & Csikzentmihalyi, 2000). One component related to the concept of positive psychology is subjective well-being (SWB). Subjective well-being has been used in several studies to scientifically define fairly abstract dimensions, including happiness, moral outlook, life satisfaction, and positive and negative emotions (Diener, 1984; Seligman & Csikzentmihalyi, 2000). There are three general components that are the focus of subjective well-being, namely the assessment of life satisfaction (cognitive), the affective aspects of positive affect (PA), and negative affect (NA) (Diener, 1984). One measuring device that uses affective dimensions (PA and NA) named HEAT has been developed by Watson, Clark, and Tellegen; and has been proven as a valid, reliable, and effective measurement tool (Watson, Clark, & Tellegen, 1988; Crawford & Henry, 2004). Subjective well-being, especially in the affective dimension, affects many aspects of life, such as social relations, work, health, etc. (Diener, 1984; Diener & Ryan, 2009).

Positive psychology tries to promote changes in the field of psychology that not only discusses disorders or diseases, but also discusses work, education, insight, love, growth, and play, as well as implementing scientific methods for complex human life (Seligman, 2002). In writing the concept of positive psychology, Seligman (2002) stated that positive psychology includes positive experiences, such as past subjective well-being and satisfaction, joy, pleasure, and present happiness, along with constructive awareness about the future, which are optimism, hope, and faith. Personal traits components of positive psychology include happiness, optimism, subjective well-being, and self-determination (Seligman & Csikzentmihalyi, 2000).

- Adolescents have various perspectives in interpreting subjective well-being.
- The highest rated themes of subjective well-being are productivity and positive emotions.
- Contributing to social environment will make adolescents feel prosperous.

Subjective well-being is an individual's perspective and a way of assessing the individual's life cognitively and affectively (Diener, Oishi, & Lucas, 2009; Seligman & Csikzentmihalyi, 2000). Subjective well-being is also said to be a scientific language of abstract constructs such as happiness, and has been linked to one component in positive psychology that needs to be investigated further (Seligman & Csikzentmihalyi, 2000). Overall, subjective well-being is a broad concept that encompasses experiencing high levels of positive emotions and moods, low levels of negative emotions and moods, and high life satisfaction (Diener, 1984; Diener et al., 2009) as indicators that are independent from each other (Huebner & Dew, 1996).

Measurement of subjective well-being usually utilizes the self-report method, where participants are asked to show global evaluations such as their life satisfaction or how often they experience certain feelings (Diener & Ryan, 2009). For the formulation of the problems in this study, namely, (1) What conditions make the subjects achieve well-being in the last two months, or more, as long as the subject could remember? (2) What is the description of feeling unwell that is meant by the subject? and (3) The method used by the subjects to be able to achieve well-being?

2. Methods

Previous studies that aim to define situations were designed according to the scanning model (Karasar, 2003). The present study analyzes the situation because this study aims to find out how adolescents view subjective well-being. Therefore, this study is considered a patterned study that is designed according to the scanning model. Next, researchers utilized theories and evidence to define well-being, and to build a framework of subjective well-being. This qualitative survey research seeks to explain and find variations of research variables in order to develop instruments for measuring the subjective well-being of adolescents in the intended population.

2.1 Participants

The participants were teenagers in DKI Jakarta. Participants were chosen directly. A total of 134 participants consisting of 115 (85.8%) female students and 19 (14.2%) male students with age ranging from 17 to 18 years old were involved in this study. This study aims to determine how adolescents view subjective well-being.

2.2 Instruments

An open-ended questionnaire that seeks to measure the "Youth's Views on Subjective well-being", was developed to determine adolescents' perceptions regarding their well-being. This

questionnaire consists of three open-ended questions to determine their views on subjective well-being. These questions listed on the research forms provide contextual information and guidance on interpretations or perspectives taken by adolescents regarding their subjective well-being, which can be completed anonymously or not anonymously, depending on the needs of researchers / instructors.

The answers were combined and collected under the same heading. The data were then analyzed using MAXQDA to form thematic coding and descriptive statistics. This research was conducted from January to February 2020 in Jakarta. Instruments used in this research include: informed consent, and measurement scale to assess the view of adolescents regarding well-being.

Data were collected using a questionnaire with three open-ended questions and complemented with demographic data of gender and age. Research questions include: "I feel well when ...?", "I don't feel well when ...?", And "How do I make myself prosperous ...?" After all the questionnaires have been collected, participants' responses were inputted in the worksheet and then analyzed by MAXQDA. MAXQDA then coded these responses. First, it looks at how often certain meaningful words appear in participants' responses using WordCloud. The next step is analyzing the relationship between the category / theme patterns identified from the answers in the questionnaire. This step is a part of the axial coding process. Then, the next step is to conduct selective coding, which is the process of integrating and filtering categories into core categories. Researchers can collect, organize, analyze, visualize, and publish research data with the help of MAXQDA. More female participants were involved in this study (85.8%), than male participants.

3. Results

The findings section presents the adolescents' well-being, which are presented in Figure 1.

The perspective of the participants regarding subjective well-being is explained, followed by manifestations or forms of application of subjective well-being in daily activities. For the first question, WordCloud detected a frequent use of the word "productive". This is then followed by analysis at the next sentence level so that it is grouped into productive themes, and so on. After analysis, the coding is categorized into theme groups. Based on the eight themes of events that determine the well-being of the research subject, it was found that the most commonly perceived subjective well-being was the feeling that the self was productive. The following chart summarizes the frequency of events that illustrate adolescents' perceptions of the concept of well-being.



Figure 1. Distribution of adolescents' perception responses on subjective well-being

Based on the eight events that contribute to well-being in the research subjects, it was found that the most commonly perceived subjective well-being was the feeling that the self was

productive. The following charts summarize the frequency of events that illustrate adolescents' perceptions about the concept of well-being.

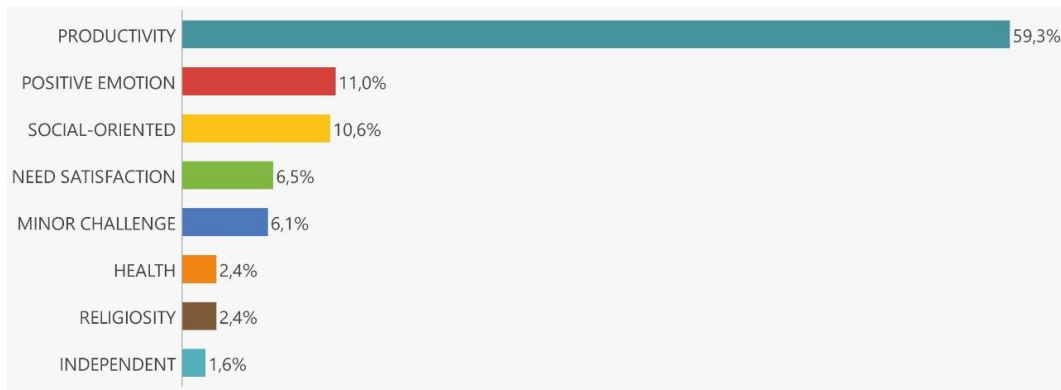


Figure 2. Percentage of adolescents' perception responses on subjective well-being

- Being a productive person is the most central theme perceived by the adolescents.
- The subjective well-being of adolescents is embraced by not only feeling happy but effective.
- Teenagers interpret that having positive emotions is a way to fulfill their well-being.
- When adolescents are able to contribute in their social environment it will make them feel prosperous.

4. Discussion

The frequency that emerges from themes related to adolescents' well-being, will be explained as follows.

Productivity. One theory that discusses the factors that influence subjective well-being is activity theory (Diener, 1984; Diener et al. 2009). This theory was introduced by Csikszentmihalyi (1990: 4), who said that happiness was achieved based on the concept of flow, which is a condition where a person gets pleasure while doing the activities they like. He further explained that the activities that contribute to the flow state are activities that require individuals to learn new abilities, activities that set goals, provide feedback, and learn mastery of the situation. These activities, whether they include competitions, opportunities, or other experiences, provide a feeling of discovery of something new, a creative feeling, and encourage someone to achieve higher performance and achievement than before. Csikszentmihalyi (1990) concluded that these activities always encourage humans to change and develop. The findings of Jackson (1992, 1995) and Moneta (2004) suggest the same thing, that factors such as experience, challenges, and situations influence how a person enjoys their activities. The findings of Martin and Cutler (2002) support this research that the experience factor and the existence of goals to be achieved encourage someone to move. First of all, to understand the concepts that underlie the relationship between productivity and subjective well-being in adolescents, Larson (2000) explains three elements experienced by adolescents, namely (1) the existence of intrinsic motivation that makes teens want to be involved in an activity; (2) this intrinsic motivation then encourages adolescents to carry out concrete activities in their environment, which include a state of attention and concentration; (3) activities that require concentration and attention occur continuously, so there are efforts to achieve goals and set strategies.

Larson (2000) also states that structured activities require adolescents to give concentration and full attention, thus providing high motivation, feelings of life, enthusiasm, and

positivity to adolescents. Fritz and Avsec (2007) also suggest that activities that are enjoyable, purposeful, and in accordance with students' ability contribute to their subjective well-being. Some types of activities that affect the subjective well-being of adolescents are activities that have aspects of sports (physical), socialization, and personal enjoyment (Csikszentmihalyi & Wong, 2014; Stepstoe & Butler, 1996; White et al., 2018; Wong & Csikszentmihalyi, 1991).

Extracurricular activities which include structured activities and provide mental and physical stimulations (Larson & Verma, 1999), were also found to have a positive influence on adolescents' well-being, as well as predicting academic achievement and prosocial behavior (Gilman, 2001; Maton, 1990; Zaff, Moore, Papillo & Williams, 2003). In addition, attending lectures, engaging in organizational activities, and doing voluntary activities also gave positive results to adolescents (Zaff et al., 2003). Zaff et al. (2003) explained that these activities have a positive impact, because it provides an opportunity for adolescents to channel the desire to carry out high-risk activities (sports activities, arts, etc.) in a healthy and productive manner, which in turn also provides experience, skills, interactions, and the feeling of being in a community. Another explanation from Kim, Suh, Kim and Gopalan (2012), explains that engaging in a productive activity is one of the healthy coping ways to deal with stress, because it gives positive feelings such as pleasure and happiness for teenagers. Engaging in productive activities such as organization and extracurricular activities gives teens the opportunity to interact and help others, as well as mitigates isolation and loneliness (Kim et al., 2012).

The thing to note further is the relationship between productivity and happiness that does not take place in one direction only. Several studies have found that when a person has high subjective well-being, their productivity in both work and activities will increase (Ledford, 1999; Sgroi, 2015; Oswald, Proto & Sgroi, 2015; Miller, 2016; Dimaria, Peroni & Sarracino, 2019). According to Diener (1984), much research still needs to be done to provide an explanation of the relationship between productivity and one's subjective well-being.

Positive Emotions. One view of the subjective well-being theory states that, the component of positive emotions or positive affect contributes greatly to one's subjective well-being (Diener, 1984; Diener, Suh, Lucas & Smith, 1999; Watson, 1988). Positive affect is defined by Watson (1988) as a pleasant interaction from someone to their environment. This includes positive aspects such as enthusiasm, pleasure, satisfaction, self-esteem, affection, and determination (Diener et al., 1999; Watson, 1988; Watson et al., 1988). Another theory suggests that one's well-being is seen from two different views, one of which is the hedonic view (Keyes, 2005; Ryan & Deci, 2001). Hedonic is referred to as a subjective aspect of well-being, which consists of positive and negative emotions (Keyes, 2005; Ryan & Deci, 2001). Diener, Sandvik and Pavot (2009) further explained that positive emotions will be more significant when viewed from the frequency or number of times someone feels these positive emotions, compared to their intensity. According to research from Steinmayr et al. (2019), emotions and feelings of adolescents experience many changes, and some adolescents experience an increase in the frequency of their emotions. Research from Keyes (2005), suggests that in adolescence, a person feels an increase in well-being on the basis of emotions, both positive and negative.

Social-Oriented. One social behavior that is said to contribute to one's subjective well-being is prosocial behavior (Weinstein & Ryan, 2010; Wheeler, Gorey & Greenblatt, 1998). Prosocial behavior is one of the behaviors helping to improve a situation without pressure from other parties (Bierhoff, 2002). This prosocial behavior is an action of an individual who has an altruistic personality (Bierhoff, 2002; Evans, Athenstaedt & Krueger, 2013). Altruism itself is motivation to help without expecting anything in return from others (Bierhoff, 2002; Lu, Jiang, Zhao & Fang, 2019). Altruistic personality has several components which include empathy (Bierhoff, 2002; Schroeder, Graziano & Davis, 2015), trust (Evans et al., 2013), social responsibility (Bierhoff, Klein & Kramp, 1991), and social behavior (Lu et al., 2019). In adolescents, several studies have found that traits of individuals who have altruistic personalities

have a strong relationship with positive emotions, which forms subjective well-being of adolescents (Lu et al., 2019; Pareek & Jain, 2012). In addition, other studies suggest that there is substantial relationship between prosocial behavior and interpersonal relationships with others, which is associated with high subjective well-being (Wentzel & McNamara, 1999). Meanwhile, prosocial behavior itself has a major influence on the subjective well-being of adolescents, which contributes to their social orientation (Yang, Li, Fu & Kou, 2016) and their subjective well-being at school (Tian, Du & Huebner, 2014).

Satisfaction Needs. Another theory regarding factors that influence a person's well-being is how a person are able to meet their basic needs (Diener, Oishi & Lucas, 2009). Several studies have proven the relationship between meeting one's needs with the state of well-being (Biswas-Diener & Diener, 2001; Deci & Ryan, 2000; Diener & Diener, 1995; Diener & Fujita, 1995; Diener & Lucas, 2000; Oishi, Diener, Suh & Lucas, 1999; Reis, Sheldon, Gable, Roscoe & Ryan, 2000; Ryan & Deci, 2000; Ryan & Deci, 2001; Sheldon & Niemiec, 2006; Turkdogan & Duru, 2012; Tay & Diener, 2011). Some theories have talked about human needs that affect one's well-being. The theory of Maslow (1954) suggests that human needs are universal and constitute a level of hierarchy, which he called the theory of hierarchy of needs (Feist & Feist, 2009). The hierarchy theory has five levels of needs from the most basic to the highest, namely: (a) physiological, basic physical needs; (b) safety, stability, rules, law and physical security guarantees; (c) belonging and love, a relationship with family, friends, and being part of a group; (d) esteem, a sense of respect which includes reputation and confidence; and (e) self-actualization, which is awareness and fulfillment of all potentials (Feist & Feist, 2009). There are several other theories that also state that needs are universal and fundamental in humans, and are things that need to be met for psychological development, especially their well-being (Deci & Ryan, 2000; Ryan & Deci, 2000; Ryff & Keyes, 1995). In self-determination theory, it is stated that basic human needs consist of three aspects, namely competence (the need to feel able), autonomy (the need for autonomy), and relatedness (the need to establish relationships with others; Deci & Ryan, 2000; Ryan & Deci, 2000). Whereas in the theory of six-factor models of psychological well-being, there are six main factors that influence a person's well-being (Ryff & Keyes, 1995). These factors are, (a) self-acceptance, which is a positive assessment of oneself and the past; (b) personal growth, that is a sense of sustainable growth and self-development; (c) purpose in life, also known as the belief that one's life is full of purpose and meaning; (d) positive relationship, indicated by having a quality relationship with others; (e) environmental mastery, that is the ability to manage life and the world around it effectively; and (f) autonomy, a sense of self-determination (Ryff & Keyes, 1995).

Some research on meeting human needs and subjective well-being is based on the needs theories above. Research from Tay and Diener (2011) bases the theory of needs on six categories, namely basic needs for food and shelter, security, social support and affection, feelings of respect, mastery of a field, and independence. This was examined on students, and it was found that the fulfillment of these needs was closely related to positive feelings towards their subjective well-being (Tay & Diener, 2011). In addition, research from Turkdogan and Duru (2012) states that meeting needs, especially independent needs, pleasure needs, and the need for strength, can predict students' subjective well-being levels. Other studies based on self-determination theory (Deci & Ryan, 2000) state that there is a strong relationship with the balance of the fulfillment of these three needs in students (Sheldon & Niemiec, 2006; Reis et al., 2000).

Minor Challenge. As mentioned earlier, Csikszentmihalyi (1990: 4) states that happiness is achieved based on the concept of flow, which is a state in which a person gets pleasure while doing the activities they like. It was further explained that, an activity will influence the positive feelings of one's subjective well-being, when the individual experiences optimal experiences (Csikszentmihalyi 1990: 72; Delle Fave, 2009; Massimini, Csikszentmihalyi & Delle Fave, 1988). According to the theory of Csikszentmihalyi (1990: 75), the optimal experience is the condition of flow itself, which occurs when there is a high challenge of the activities undertaken,

accompanied by high individual abilities too. It was further explained that the balance between challenges and abilities is very important to achieve flow conditions, with the following conditions: (a) if the challenge is higher than the individual's ability, then the individual will reach the anxiety condition, whereas (b) if the challenge is lower than the ability individual, then the individual will reach boredom condition (Csikszentmihalyi, 1990: 75; Moneta, 2004; Nakamura & Csikszentmihalyi, 2014).

Health. Several studies have suggested the importance of the role of subjective well-being on one's health (Diener & Ryan, 2009; Dolan & White, 2007; Matsumoto & Juang, 2013). However, the relationship between health and subjective well-being is apparently more complex. Here are some studies that try to explain the relationship of health with one's subjective well-being.

Religiosity. Religion is a forum for humans who strive to find meaningful paths in achieving a sacred goal (Pargament, 1999). While religiosity, or spirituality, is the essence of religion, namely how a person thinks, feels, and interprets something related to a holy perspective (Pargament, 1999). Emmons, Cheung and Tehrani (1998) suggest the importance of how to measure religiosity to see its effect on mental health. In adolescents, several studies have found a positive relationship between religiosity and subjective well-being, as well as a negative relationship with depression (Abdel-Khalek, 2009; Abdel-Khalek, 2010; Abdel-Khalek, 2012; Abdel-Khalek & Eid, 2011; Abdel-Khalek & Lester, 2010; Rew & Wong, 2006).

Independence and Autonomy. One aspect of needs theory, such as self-determination theory and six-factor models of psychology well-being, includes a sense of autonomy that plays a role in achieving one's subjective well-being (Deci & Ryan, 2000; Ryan & Deci, 2000; Ryff & Keyes, 1995). Autonomy is a state of self-regulation which is on the same dimension with independence, namely the ability to care for oneself (Ryan & Lynch, 1989). Autonomy is a factor that is said to have a stronger relationship with subjective well-being with increasing age (Sheldon, Kasser, Houser-Marko, Jones & Turban, 2005). In addition, the positive relationship between autonomy and subjective well-being is proven to be universal, which applies to all people in the world with different cultures (Ryan & Deci, 2000; Tian, Chen & Huebner, 2013; Yu, Levesque-Bristol & Maeda, 2017). Meanwhile, in adolescence is also said to be a transitional period that causes tension, because adolescents are trapped between feelings of autonomy with feelings of attachment to parents (Krins, Beyers, Soenens & Vansteenkiste, 2009; McElhaney, Allen, Stephenson & Hare, 2009). Adams and Shea (1979) add that adolescents' independence plays an important role in the search for their identity.

5. Conclusion

This research uses a qualitative survey approach to study adolescent subjective well-being and the background. This article demonstrated how one measures opinions. The results of this study is that adolescents as research participants have a variety of perspectives in interpreting subjective well-being including productivity, positive emotion, social oriented, need satisfaction, minor challenges, health, religiosity, and independence. Productivity and positive emotions get the highest frequency related to well-being as expressed by adolescents.

Constraints related to subjective well-being should be overcome, such as the limited samples, other demographic settings that can still be explored as well as variations in research methods. However, because research on subjective well-being can contribute to core theoretical questions about the meaning, values and perspectives of adolescents regarding conditions that make them feel prosperous, this research uses an analytic approach of constant comparative techniques, comparison of ranking order, and visual representation of coding, using MAXQDA, which the triangulation method be used in the future. This study explores subjective well-being

subjectively from the perspective of adolescents. Meanwhile, it could be that in the future, other studies will produce more objective findings not only in one context of the stages of human development, but are multidimensional in nature and deserve to be studied more carefully.

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