The Role of Vocational Identity as a Mediator in the Relationship between Parental Career-Related Behavior and Career Decision-Making Process

Eveline¹,²*, Fransisca Iriani Roesmala Dewi³, and Bonar Hutapea³

¹. Psychology Master Programme, Department of Psychology, Universitas Tarumanagara, Jakarta 11440, Indonesia
². Departement of Food Technology, Universitas Pelita Harapan, Tangerang 15811, Indonesia
³. Department of Psychology, Universitas Tarumanagara, Jakarta 11440, Indonesia

*E-mail: eveline.fit@uph.edu

Abstract

Career decision-making process (CDMP) is an individual skill in determining career decisions. During crisis development, transition-exploration adolescent may have difficulty in determining career goals. Two aspects stabilizer CDMP i.e. vocational identity (VI, internal aspect) and parents’ involvement in adolescent career issues (external aspect). This study investigated parental involvement in three forms (support, interference, lack of engagement) of the variable parental career-related behaviors (PCB). Based on previous research, the VI role to CDMP can be enhanced through the positive role parents. Therefore, this research investigated the VI role as a mediator in the PCB and CDMP relationship, each VI or PCB role directly to CDMP, and PCB role to IV. Research subjects of first semester (~19 years) students from a private university in Lippo Village-Tangerang were selected through simple random sampling. Data were analyzed with SPSS Amos v.22. Multivariate regression in path analysis showed the theoretical model of each form of PCB did fit with the empirical data. VI has a direct role to CDMP (38.00, 32.00, and 35.00%). Every form of PCB shows a direct role to CDMP (19.00, -13.00, and -15.00%). PCB interference and lack of engagement contribute to VI at -23.00 and -15.00%. VI of each PCB form shows no role as a mediator in the PCB and CDMP relationship on exploration-transition university students.

Peran Identitas Vokasional sebagai Mediator dalam Hubungan antara Parental Career-Related Behavior dan Career Decision-Making Process

Abstrak

Career decision-making process (CDMP) merupakan keterampilan individu menentukan keputusan karir. Pada perkenanannya di masa kritis, seringkali remaja mengalami eksporansi-transisi mengalami kesulitan menentukan tujuan karir. Dua aspek peneguhan CDMP adalah identitas vokasional (IV [aspek internal]) dan keterlibatan orang tua terhadap persoalan karir remaja (aspek eksternal). Pada penelitian ini keterlibatan orang tua diselidiki melalui tiga bentuk (support, interference, lack of engagement) dari variabel parental career-related behavior (PCB). Berdasarkan penelitian terdahulu, IV remaja dalam peranannya terhadap CDMP dapat ditingkatkan melalui peran positif orang tua. Oleh karena itu, penelitian ini menyelidiki peran IV sebagai mediator dalam hubungan antara PCB dan CDMP, peran langsung IV dan PCB masing-masing terhadap CDMP, serta peran PCB terhadap IV. Subjek mahasiswa semester 1 (~19 tahun) pada salah satu universitas swasta di Lippo Village-Tangerang ditentukan melalui teknik simple random sampling. Data penelitian dianalisis dengan program SPSS Amos v.22. Hasil analisis jalur (regresi multivariat) menunjukkan model teoritis setiap bentuk PCB adalah sesuai (fit) dengan data empiris. IV berperan langsung terhadap CDMP (38.00, 32.00, dan 35.00%). Setiap bentuk PCB berperan langsung terhadap CDMP (19.00, -13.00, dan -15.00%). PCB interference dan lack of engagement berperan terhadap IV sebesar -23.00 dan -15.00%. IV setiap bentuk PCB tidak berperan sebagai mediator dalam hubungan PCB dengan CDMP mahasiswa eksporansi-transisi.

Keywords: career decision-making process, career development, parental career-related behavior, vocational identity, university student

Citation:
Eveline, Dewi, F.I.R., Hutapea, B. (2015). Peran identitas vokasional sebagai mediator dalam hubungan antara parental career-related behavior dan career decision-making process. Makara Hubs-Asia, 19(1): 1-14. DOI: 10.7454/mssh.v19i1.xxxx
1. Introduction

Adolescence is a phase where one prepares for a career in line with the field of study chosen. Super (1980) in the theory of career development stated that a chosen field of study can be seen as a small cycle (i.e. career decision-making process) being part of a big cycle of one’s entire career development life-span. At the end of the small cycle, one determines the preferred career plan which in time will affect one’s career action, for instance when one enters an academic discipline or determines employment options after graduating from university.

Career preparation period for adolescents is an important period due to its usefulness in facing the world of work that is becoming more dynamic, complex and increasingly demanding in terms of personality and professionalism suitable for work in the future. Based on that, adolescents require career decision-making process skills when they are about to graduate and ready to work. Adolescents need self-knowledge, work information and a supportive surrounding so that they are able to make career decision. In fact, this is a process of determining career choice (career decision-making process [CDMP]) in adolescents, which in turn enables them to make career decisions (Khasawneh, Hailat, & Jawarneh, 2007).

Many findings of the previous research have shown that the process determining a career choice as a main chronic issues for an adolescent. Apart from that, Khasawneh et al., (2007) stated that determining career goals often becomes a difficult matter for adolescents, including those in university considering a number of challenges of identifying profession matching their personality, interest and capability. The difficulty experienced by adolescents in determining career correlates tightly with their psychological issues taking place in the adolescence phase, which revolves around identity development that displays an image of self-identity of an individual. Burn (1993) proposed that the concept of self-identity determines one’s occupation so that one’s line of work and image will be in synch and can be expressed in accordance with one’s vocational self-concept. Super described vocational self-concept as part of the entire image of one’s self-concept.

Super’s theory also stated that during adolescence, the majority of individual are in the exploration phase (15-24 years of age), comprises of learning about oneself, trialling roles and exploring occupations accessible in the surroundings, for instance at school, leisure and part time jobs (Burn, 1993). The exploration phase itself is comprised of three subphases: crystallization subphase (15-17 years of age), transition or specification subphase (18-21 years of age), and trial subphase (22-24 years of age); where the first two aforementioned belong to late adolescence (18-20 years of age). This is consistent with Papalia, Olds, and Feldman (2007) stating that an adolescent is an individual in the age range 11–20.

Burn (1993) claimed that during transition subphase, individuals no longer make tentative choices based on needs, interest, capacity, values and integration to be tried out in fantasy, discussion and work. But they rather weight the importance of reality when they enter the job market or professional training and attempt to implement a self-concept which is then allocated to a suitable line of work during the trial subphase. Thus, transition subphase is an essential subphase because this is where adolescents are in the midst of crisis of determining career decisions. A research by Smitina (2009) about the relationship between vocational self-concept and the risk of dropping out from university added that in the exploration-transition phase, adolescents tend to experience psychological issues related to choosing a field of study or career in the future.

Some findings of the following research affirmed such crisis among adolescents during the exploration-transition phase. As reported, about 48% of 170 female students at the University of Latvia required assistance in terms of dealing with career uncertainty and experienced anxiety over job hunting (Voitkane & Miezite, 2006). Norris (2008) in her research on first-year psychology students also found out that about 78.1% of them were in need of counseling assistance concerning their career in the future. Brown and Lent (2005) mentioned this natural problem happens to every individual, particularly adolescents who are in their early to half-way study period in university.

In consideration of adolescence crisis during exploration-transition phase, this research focuses on adolescents in the age range 18–20 as its subject. With age range means that they are qualified as being in the adolescence age group (11–20 of age) according to Papalia et al., (2007) and also being in the exploration-transition subphase according to Super’s theory (Burn, 1993). Individuals in the age range 18–20 years of age generally are students in the first- or second-year of study in university.

In relation to crisis period regarding uncertainty of choice or determining programme of study and career during exploration-transition, there are a few things that contribute to the process of determining an individual’s career choice. Hirschi (2012) asserted vocational identity (VI), as part of self-concept, is an internal aspect that is central control component to one’s career development. Vocational identity provides framework for purpose and self-directing affirmation, facilitation of transition from school to matters related to vocation and work, as well as contribution to self-adjustment and well-being.
In addition, Brown (2002) stated adolescents, as they develop, will start to synchronize their aspiration to internalize self-uniqueness and then start to form vocational identity as a reflection of themselves. The concept of vocational identity further developed in a study about the cause of doubt in terms of one’s occupation and career (Reardon & Lenz, 1999). This refers to Holland’s theory that defines vocational identity as a clear and stable reflection of one’s purpose, interest, personality and talent which contribute to the determination of vocational decisions and self-believe in terms of making career decisions.

According to Smitina (2009), students with low vocational identity have a high risk of experiencing disruption in their study. The findings are consistent with career and development theory arguing that having an identity in regard to vocation, career and profession would help adolescents build commitment to education and work (Erikson in Smitina, 2009) as well as the composure to make the right career decisions in the future (Super in Smitina, 2009). Moreover, in this research the relation between the level of vocational identity and the determination of vocational decisions was also found. The presence of vocational identity encourages the emergence of motivation and behavior in regard to vocation and career. This relation indicates that students, possessing more insight and assessment on interest, talent and skills are more effective in making career decisions. Poe in Khasawneh et al., (2007) specifically also found similar correlation tendency suggesting high level of vocational identity can be an indicator of individual readiness in terms of making career decisions.

The research on career development taking into account vocational identity variable has been done extensively, including personality and educational aspects as well as career development and its correlation with self-efficacy, although its role in career decision-making process is yet to be tested directly. The research that has been conducted is limited to certain variables, whereas in other research, the certain variables are connected to the process of career decision-making. Furthermore, similar research in general has also applied to school students and employees, instead of university students who are going through the development phase. That is why in this research the vocational identity variable will be applied to adolescent students undertaking their first year of study in university. This is in accordance with the appropriate age range according to Super’s career development theory and the use of vocational identity approach by Holland.

Other aspects that also contribute to one’s career decision-making process are external aspects. Lindstrom, Doren, Metheny, Johnson, and Zane (2007) as well as Garg, Kauppi, Lewko, and Urajnik, (2002) claimed that external conditions such as complex family interaction pattern can shape one’s decision-making process in terms of career orientation in the future. That includes parenting style and parents’ behaviour which in fact may contribute to adolescents’ career development through vocational identity as a personal factor. Dietrich and Kracke (2007) also added that parents are the main partner who can help adolescents prepare themselves for choosing a career and are the most dominant external factor. This is compliant with the findings from previous research about adolescents frequently discussing about career matter with their parents, making parents a main aspect of education and career transition during adolescence.

Previous research has looked into the influence that parents have over the course of adolescents’ career development through parenting style or attachment approach, but such approach seems to have a limitation in terms of concluding the following implications such as intervention measure and counseling based on the resulting findings. Additionally, this approach only displayed linear influence of parents’ behavior and failed to display a collective correlation (interaction) between adolescents’ behavioral aspect and career development. Dietrich and Kracke (2007) validated the approach of parental career-related behavior (PCB) from previous research conducted by Kracke and Noack, (2005); Oechsle, Maschetzke, Rosowki, and Kanuf, (2002); Young, Valach, Ball, Paseluikho, Wong, DeVries et al., (2001) which were all qualitative in nature and basically argued about the impact of parenting behavior on adolescents’ career exploration and decision-making difficulties.

Based on the findings from previous research by Kracke and Noack; Oechsle et al.; Young et al. (in Dietrich & Kracke, 2007) that is qualitative in nature, three aspects emerged as a reflection of parents’ behavior, which are: support, interference, and lack of engagement. These three behavioral patterns have been used in the research on two correlated aspects that are essential for adolescents’ career exploration and decision-making difficulties, even though their roles in career decision-making process through vocational identity have yet to be researched. Therefore, in this research the PCB variable will be used in the same manner as Dietrich and Kracke (2007) research. This is done to affirm previous research findings concerning the role of parents’ behavior in shaping adolescents’ career decision-making. The study about this variable is expected to show the interaction between every parents’ behavior and adolescents’ career decision-making through vocational identity; in other words vocational identity serves as a mediator between every form of parents’ behavior and adolescents’ career decision-making.

In Indonesia, research focusing on the three variables (vocational identity, parental career-related behavior,
The chronic view on career issues may have triggered individuals to disregard their importance in daily life. As a consequence there is no empirical data available that this research can based upon, despite the high emergence of cases or phenomena related to career decision-making process which can cause disruptions in individuals’ career development in the future.

In practice, career issues have emerged due to incorrect career decision-making process. Such issues would be disruptions or failures of students finishing their higher education study (Wintre, Bowers, Gordner, & Lange in Germeij & Verschuereen, 2007) which force them to experience a switch to other fields of study (McCoy, 2004) or even drop-out when the permitted duration of study has expired (Smitina, 2009). Moreover, doubts in determining a career in a later stage such as after graduation can also take place because individuals fail to find a career path (Komara, 2012). This is triggered by poor initial career orientation and commitment while other career alternatives become more lucrative as they do more exploration (Germeij & Verschuereen, & Soenens, 2006), which in turn led to unsteadiness and instability of the initial choice of career, which further led to a change in the career course (Kunnen in Komara, 2012).

An identical research on every variable studied in this research has also not been applied to subjects during the time of crisis in career decision-making process, which in this case are adolescents in exploration-transition phase. Researchers are interested to examine this deeper, since there have been many emerging career development issues while only few scientific study and to add to that the absence of focus on the subjects undergoing the crisis, by providing a major hypothesis about the role of vocational identity as a relationship mediator between every form of parental career-related behavior and students’ career decision-making undergoing exploration-transition phase. This research also studies a minor hypotheses about the direct role of vocational identity and every form of parental career-related behavior in career decision-making process, as well as the role of parental career-related behavior with respect to students’ vocational identity undergoing exploration-transition. The research findings will certainly affirm and expand previous findings as well as explore new findings that are expected to stimulate concern about psychology in education and other branches of science related to dealing with career development.

2. Methods

This research was designed using non-experimental quantitative approach that is descriptive correlational in nature. The data collected was then be processed with statistics using double regression or mediation regression with independent variables affecting dependent variables both directly and indirectly.

The subjects of the research were 334 bachelor students (age 18-20), males and females, studying at a private university in Lippo Village–Tangerang, all 12 academic faculties including 25 academic majors. The number of subjects determination was based on the calculation technical guidance by Gay and Diehl (in Cozby, 2005) for descriptive correlational research method (10% of the population). The number of subjects collected was compliant with the minimum number required for path analysis with Structural Equation Modeling (SEM), in which the minimum is 200 people (Lei & Wu, 2007). The software used for running the calculation is SPSS Amos for Windows version 22. The sampling technique was started with stratified random sampling by proportionate random and then the determination of the research subjects was continued with simple random technique by random number system.

The measurement of vocational identity variable used a questionnaire with adaptation to Vocational Identity Scale (VIS) which is a subscale of My Vocational Situation system–Holland’s design, et al., (1980) containing 18 negative questions with Guttman scale (S = Agree [1] and DA = Disagree [0]). A total score was gained from four main aspects identified and one independent item aspect; all the aspects did not compose a vocational identity variable uniformity (uni-dimensional/ not multi-dimensional). The higher the gained score indicates a more established vocational identity. Example of items: “I am worried about making an incorrect choice if I had to make an occupational choice right right now” (anxiety aspect), “I doubt if my current choice of occupation is right for me” (confidence aspect), “I do not know what my primary strengths and weaknesses are” (self-assessment aspect), I do not really know what the workers do in various occupations” (occupational information aspect). Validity-reliability test result: alpha cronbach coefficient is 0.86; correlation of above items is 0.02 after the avoidance of four items.

The measurement of parental career-related behavior (PCB) variable used a questionnaire with adaptation to PCB instrument (Dietrich & Kracke, 2007). The questionnaire containing 15 positive questions with the Guttman scale (S = Agree [1] and DA = Disagree [0]) included three forms of parents’ behavior and involvement: support, interference, and lack of engagement; the three aspects did not compose a variable uniformity. Operationally speaking, the total score was gained from every PCB aspect. The higher the gained score indicates a more established vocational identity. Example of items: “My parents give advice on the available career choice” (support aspect), “My
parents have their own idea about my future vocation and try to influence me with that idea” (interference aspect), “My parents do not care about the preparation of my line of work” (lack of engagement aspect). Validity-reliability test result: correlation of above items is 0.02; alpha cronbach coefficient is 0.71 (support aspect), 0.65 (interference aspect), 0.72 (after the voidance of one item under the lack of engagement aspect).

The measurement of career decision-making process (CDMP) used a questionnaire with adaptation to The Study Choice Task Inventory (SCTI) instrument – designed by Germeijs and Verschueren (2006). The SCTI questionnaire itself is composed of six independent subscales: the orientation to choice, the self-exploratory behavior, the broad exploratory behavior, in-depth exploratory behavior, decisional status, and the commitment.

The orientation to choice subscale contained seven positive items and five negative items with attitude scale of semantic differential rating as the measurement method; the resulting data gained is in the form of interval. Every statement item has a score range 1 to 5. Operationally speaking (Germeijs & Verschueren, 2006), the subscale measure individual awareness of own needs in terms of making a decision (six items) and individual motivation level in terms of career decision-making (six items). Higher score would indicate better CDMP. Example of positive items: “I am motivated to solve the difficulty in choosing a field of study”. Example of negative items: “To think that I have to choose a field of study does not happen often to me”. Validity-reliability test result: alpha cronbach is 0.75; correlation of above items is 0.02 after the voidance of four items.  

The self-exploratory behaviour, the broad exploratory behavior, and in-depth exploratory behavior subscales used Likert rating scale as the measurement method; the resulting data gained is in the form of interval. One of the three respons must be chosen on each item: N = Never, S = Sometimes, O = Often. The score of each question item ranges from 1 to 3.  

The self-exploratory behavior subscale contained 20 positive questions in four domains (skills, interest, values, and learning approach). Operationally speaking (Germeijs & Verschueren, 2006), the subscale measured the frequency of self-explorative behavior during previous and current academic years from six relevant sources of information (oneself, friends, school counselor, teacher and others) including skills, interest, grades, and learning approach. Higher score would indicate better CDMP. For example: “I consciously reflect my strengths and weaknesses” (skills), “I have discussed about my interest with my parents.” (interest), “I have discussed about what matters to me and what does not matter to me with my friends.” (values), “I have discussed about my learning method with my teachers.” (learning approach). Validity-reliability test result: alpha cronbach is 0.86; correlation of above items is 0.02 after the avoidance of three items.

The broad exploratory behavior subscale is composed of the first part (5 positive question items) and second part (1 optional question item, 1 open question item). Operationally speaking, this subscale measured individuals behavior in exploring various field of study and requested individuals to mention the names of field of study that they once had gathered information on (Germeijs and Verschueren, 2006). Higher score would indicate better CDMP. For example: “I have learned the overall content of the field of study”. Validity-reliability test result: alpha cronbach is 0.66; correlation of above items is 0.02 without any avoidance of items.  

The in-depth exploratory behavior subscale’s first part had the scale of attitude with categorized rating as its measurement method; the resulting data gained had no quantitative connotation so no math operations were needed. This subscale only facilitated the subjects in sorting out what was needed to filling in the second part. One out of the five respons had to be chosen in each question item: “I do not seek any information”, “I only look for information about a particular field of study”, “I look into two to five fields of study”, “I look into six to ten fields of study”, “I seek out information as much as I can about fields of study”.  

The in-depth exploratory behavior subscale’s second part contained 10 positive question items. This subscale, operationally speaking, measured individual behavior in terms of exploring in depth to filter field of study alternatives (Germeijs & Verschueren, 2006). Higher score would indicate better CDMP. For example: “I have discussed about the study and/or profession with experienced people in the field”. Validity-reliability test result: alpha cronbach is 0.78; correlation of above items is 0.02 without any avoidance of items.  

The decisional status subscale contained two open question items. The subjects were requested to list all fields of study that they considered and also their first choice. This subscale had the scale of attitude with categorized rating as its measurement method; the resulting data gained is in the form of interval. Operationally speaking, this subscale measured individual behavior in terms of considering various field of study alternatives (Germeijs & Verschueren, 2006). Higher score would indicate better CDMP. Numerical rating: 1 (there is no primary choice and there is no list of alternatives), 2 (there is no primary list and there is a list of alternatives), 3 (there is a primary list and there is a list of alternatives), 4 (there a primary list and there is
no list of alternatives). The validity-reliability test was not able to be conducted because the subscale only had two open question items with rating gained 1.

The commitment subscale contained three positive items and five negative items. This subscale had the scale of attitude with categorized graphic rating as its measurement method; the resulting data gained is in the form of interval. Operationally speaking, this subscale measured individual behavior in terms of committing (faith and bond level) to the chosen field of study (Germeijrs & Verschueren, 2006). Higher score would indicate better CDMP. One of the six responses that had to be chosen in every item was: “Yes” or “Very” to “No” or “Strong No” with a score rating 1 to 6. For example: “Will you stick with this field of study when you discuss it with people who opposed to your chosen field of study?”. Validity-reliability test result: alpha cronbach is 0.83; correlation of above items is 0.2 without any avoidance of items.

3. Results and Discussion

Demography description of research subject. Among the 334 subjects, 125 (37.40%) were males and 209 (62.60%) were females. Three academic majors with the highest distribution of subjects: Food Technology (21.90%), Hospitality Management (9.00%), dan Management (9.00%).

Description of data of every research variable. The description of research subjects was based on every research variable of the subject group studied, through normal distribution and variable category (strong/high or weak/low). The calculation of every variable was based on total score. The decisional status subscale excluded CDMP variable because it was not convergent with the other subscales. The calculation and display of description of every variable was done for every pattern of path diagram of interrelated variable designed according to each PCB variable aspect (support, interference, and lack of engagement aspect).

The test result of normal distribution for vocational identity with the support and lack of engagement PCB diagram pattern shows normal distribution after the avoidance of several outlier was conducted, except the interference aspect. Kurtosis of each aspect: 1.05, 0.25, 1.22 (-2.58 to +2.58; significance 0.01 [1%]). Subject category (low [0-2] or high [3-4]) shows that 90.40% subject are in the low category of interference aspect, and 93.18% are in the low category of lack of engagement aspect. The majority of subjects received supporting behavior from their parents in regard to career matter.

The test result for CDMP variable on the three PCB diagram pattern shows normal distribution after a avoidance of several outlier was conducted, except the interference aspect. Multivariately speaking, c.r. kurtosis: 1.05, 0.25, 1.22 (-2.58 to +2.58; significance 0.01 [1%]). Subject category (weak [49-118] or strong [119-188]) shows the majority of subjects has strong degree of CDMP in each PCB diagram pattern: 86.23% (support), 88.02% (interference), 91.27% (lack of engagement).

Conformity (goodness of fit) of research model. The test result for model conformity on every pattern of PCB path diagram shows value of $X^2$=0.00, sig.probability=1.00, RSMEA=0.00, GFI=1.00, CMIN/DF=0.00, TLI=1.00, NFI=1.00, and the value “NA” for every modification indices. Based on criteria cut-off value, a model is fit (in conformance) if: $X^2\leq56.94$, sig.probability$\geq0.05$, RSMEA$\leq0.05-0.08$, GFI$\geq0.90$ (close to 1), CMIN/DF$\leq0.90$ (close to 1), TLI$\geq0.90$ (close to 1), NFI is close to 1.00, the value “NA” for every modification indices shows no other model is advised. (Santoso, 2011). The result test for goodness of fit research is established as fit and recursive.

Research hypothesis test results. The hypothesis tes was conducted by using the pattern of path diagram of interrelated variable designed fittingly to every PCB variable aspect: support, interference, and lack of engagement. The test on the four hypotheses was conducted by using the pattern of path diagram of which majority of subject had low vocational identity: 57.28% (support), 57.50% (interference), 56.81% (lack of engagement).
The Role of Vocational Identity as a Mediator

Table 1. Regression Weights of Every Pattern of PCB Path Diagram

| Path diagram pattern | Causality | Estimate | S.E. | C.R. | P     | Significance |
|----------------------|-----------|----------|------|------|-------|--------------|
| PCB A                | PCB A → CDMP                  | 2.54     | 0.67 | 3.80 | ***   | Sig.         |
|                      | IV → CDMP                       | 1.79     | 0.24 | 7.45 | ***   | Sig.         |
|                      | PCB A → IV                      | 0.08     | 0.16 | 0.53 | 0.60  | Not Sig.     |
|                      | PCB B → CDMP                    | -1.42    | 0.57 | -2.48| 0.01  | Sig.         |
| PCB B                | IV → CDMP                       | 1.59     | 0.26 | 6.22 | ***   | Sig.         |
|                      | PCB B → IV                      | -0.51    | 0.12 | -4.23| ***   | Sig.         |
|                      | PCB C → CDMP                    | -2.33    | 0.82 | -2.86| 0.00  | Sig.         |
| PCB C                | IV → CDMP                       | 1.62     | 0.25 | 6.51 | ***   | Sig.         |
|                      | PCB C → IV                      | -0.48    | 0.19 | -2.61| 0.01  | Sig.         |

Table 2. Standardized Regression Weights of Every Pattern of PCB Path Diagram

| Path diagram pattern | Causality | Estimate |
|----------------------|-----------|----------|
| PCB A                | PCB A → CDMP                  | 0.19     |
|                      | IV → CDMP                       | 0.38     |
|                      | PCB A → IV                      | 0.03     |
|                      | PCB B → CDMP                    | -0.13    |
| PCB B                | IV → CDMP                       | 0.32     |
|                      | PCB B → IV                      | -0.23    |
|                      | PCB C → CDMP                    | -0.15    |
| PCB C                | IV → CDMP                       | 0.35     |
|                      | PCB C → IV                      | -0.15    |

PCB lack of engagement significance (p<0.05) has a negative 15.00% in its relations with the ability to make career decisions. The process found between the three aspects of PCB with CDMP in adolescents are in line with the findings of Nota et al., (2007); parents’ involvement can affect

The relations found between the three aspects of PCB with CDMP in adolescents are in line with the findings of Nota et al., (2007); parents’ involvement can affect

The process of choosing a career. The form of support can improve career development, but the forms of closeness and dependency (interference) and rejection (lack of engagement) can hinder career maturity. The higher level of maturity individuals possess, the more skillful they are in making their own decision (Bergen, 2006).

VI relationship (in every form of PCB) with CDMP. Vocational identity significance (p<0.05) plays a direct role in the process of determining a career. Every diagram pattern shows positive values in terms of parents’ involvement: 38.00, 32.00, and 35.00% (Table 1, 2). Solid comprehension and assessment of oneself and surroundings related to career will help adolescents articulate and determine their career well (Santrock, 2011).

A proven indication of better parents’ involvement in the form of support will better shape individuals vocational identity and their ability to determine their career choice. The interference pattern, vocational identity and CDMP are proven to be positive in value. Adams (in Romano, 2004) stated that conflicting and insisting parenting will disrupt the development of identity during the transition from adolescence to adulthood, moreover disrupt the ability to determine a career.

The lack of engagement relationship pattern contradicts the initial assumptions of this research, while vocational identity and CDMP are positive in value instead.
Subjects’ vocational identity has solidify optimally and is in the process of transitioning from identity crisis period. Thus they are capable of making career decisions. Parents’ involvment relatively no longer becomes a determining factor. Individuals start to be independently capable of making decisions out of various problems as self-determination potential develops (Bergen, 2006). Factors such as influence from friends, siblings (Walmsley, Wilson, & Morgan, 2010), family earnings, parents’ profession and work status at the time, parents’ last education (Clutter, 2010), heredity, personality, psychosocial in the surroundings, interest and talent (Arulmani & Nag-Arulmani, 2004) which were not controlled in this research may have a role in shaping the ability to make career decisions.

Any form of parents’ involvment, vocational identity can contribute directly to the process of determining career of students undergoing exploration-transition. Vocational identity is one of influencing factors aside factor of mother’s acceptance and study period in university in terms of making career decision-making (Guerra and Braungart-Rieker; Hargrove et al. in Jones, 2012).

In general, vocational identity is with CDMP having a positive value. Similar to Khasawneh et al., (2007), more established vocational identity generates composure in determining career decisions, except if the forming of vocational identity is conditioned negative (interference, lack of engagement); ideally incurring negative relationships which in this research is positive instead. This is due to subjects’ ages and other influencing factors as discussed before. Li and Kerpelman in Jungen (2008) amplified these two reasonings as a form of separation from their parents that facilitates adolescents’ identity forming and adolescents becoming independent from their parents.

The relations between each form of PCB and VI. Table 1, 2; support aspect has no significant relation (p>0.05) with CDMP (supported by low influence value [3.00%]).

The other two relations has significance (p<0.05): -23.00% (interference), -15.00% (lack of engagement). PCB interference and lack of engagement contribute to vocational identity.

Intervening behavior by parents, career wise, is proven to hinder adolescents’ vocational identity (23%). Adolescents lose their comprehension and personal wants in regard to vocation when parents impose and try to implement their own personal wants upon the adolescents’ career choice. Afterwards, that could increase confusion and uncertainty when the adolescents face career decision-making (Santrock, 2011). It is seen on the lack of engagement diagram pattern that less parents’ involvement would cause weaker adolescents’ vocational identity due to the emergence of vocational identity turmoil.

In overall, the complex relationship between parents’ involvment and adolescents’ career development is found to be affecting vocational identity. Although not all entirely in compliance with previous findings since the form of support has no influence on adolescents’ vocational identity. Garg et al., (2002), Khasawneh et al., (2007); vocational identity is influenced by parents’ involvment towards adolescents, although in those research no specific study was done to examine the involvment forms. Jungen (2008) also provides similar findings. However, in that research the form of isolation of parents’ involvment, within the interaction involvment pattern, instead encourages independent adolescents to explore their identity and find a career that fits their vocational identity. The form of isolation here means parents’ role in their mission to assist adolescents towards maturity, not in the form of not caring or total ignorance.

Jungen (2008) statement is congruent with subjects’ condition that is reaching the end of their adolescence, in other words almost completing their identity crisis period, as well as continuing their vocational identity development which is in accordance with their development stage in life and career. Individuals start to become more independent as self-determination develops in connection with decision-making (Bergen, 2005). Individuals tend not to involve parents when they make decisions, particularly when they see themselves capable of handlings problems on their own, unless there is the will to interfere coming from their parents or too much lack of engagement. Subjects display the relations between the two variables, however their influence is relatively small (23.00% [interference], 15% [lack of engagement]). Parents’ role no longer becomes a source of influencing factor in the shaping of vocational identity considering subjects’ age range almost surpasses adolescence.

Several factors that might also influence the shaping of adolescents’ vocational identity, yet were not controlled in this research: influence from friends, relatives, interest and talent, scholarship, family earnings, parents’ profession and work status at the time, parent’s last education, heredity, personality, psychosocial (Arulmani & Nag-Arulmani, 2004; Jungen, 2008; Clutter, 2010; Walmsley et al., 2010).

VI role as a mediator in every form of PCB and CDMP relationship. The test result interpretation of vocational identity as a mediator variable can be determined through: (1) PCB significant relationship with VI; (2) VI significant relationship with CDMP; (3) PCB Influence magnitude over CDMP after being
mediated should be smaller than prior to mediation; (4) the magnitude of multiplication result of PCB to VI value with VI to CDMP value during mediation should be bigger than PCB to CDMP without mediation value; (5) PCB to VI influence magnitude should have a big value so that during multiplication, the value generated will be bigger than VI to CDMP influence magnitude (Santoso, 2011). With reference to those terms as well as Table and 2, the fourth hypothesis can be answered: the presence of vocational identity as a mediator between parents’ involvement and adolescents’ career decision-making undergoing exploration-transition is not proven.

In addition, according to Lopez in Linstrom et al., (2007) and Garg et al., (2002) vocational identity can mediate interaction pattern of family involvement and adolescents’ ability to make career decisions, which is not congruent with this research. The most plausible reason would be those research were conducted on school students, while this research was conducted on first-year university students.

With reference to Jungen (2008), adolescents need positive involvement of their parents so that their identity serving as fuel for career exploration develops. However, constructing vocational identity is not only dependant on parents’ involvement. If it is forced, consequently vocational identity will have less practical significance to be applied in career development of late adolescents. Jungen (2008) instead suggested late adolescents be given some isolation form of parents’ involvement: in the form of limited support, adjusted to the adolescents’ capability in handling career issues (not out of unconcern or ignorance). This form is expected to facilitate other variables that help shape vocational identity to play bigger roles. Parents’ involvement is only as a variable that eases other variables to enter and be involved in the shaping of adolescents’ vocational identity. Thus, adolescents will live more independently and explore their identity fitting their self-concept. Eventually adolescents will find career match as an implementation product of their own vocational concept.

If compared to the findings in this research, Jungen (2008) suggestion has become an expressed fact. First, PCB support has no influential relationship with vocational identity. Significant relationship takes place in the form of interference as an involvement. Its influence, however, is considered low (23.00%). So does lack of engagement as a form of involvement. Although it has significant relationship with vocational identity, its influence is also considered low (15.00%). Secondly, the three forms of parents’ involvement have low influence over CDMP (19.00, 13.00, and 15.00%). Lastly, the influence of vocational identity in every form of parents’ involvement over CDMP is only 32.00-38.00%: 60.00-70.00% compared to other influential factors.

Bergen (2006) argued that late adolescents begin to be capable of independently making decisions on problems due to self-determination that keeps developing. The presence or absence of forms of parents’ involvement will not hinder adolescents from making their own decisions, whether it is a product of vocational identity or other immediate factors or other mediating factors. Arulmani and Nag-Arulmani (2004), Clutter (2010), Jungen (2008), and Walmsley et al., (2010) suggested several influential factors that shape adolescents’ vocational identity can affect career decision-making skills: influence from friends, siblings, interest and talent, scholarship, family earnings, parents’ profession and work status at the time, parent’s last education, heredity, personality, and psychosocial. Those factors cannot be controlled, cannot be known with certainty which variables contribute to vocational identity as mediator variable or even direct variable to CDMP of university students undergoing exploration-transition.

Test results of disparity on every variable based on gender. Disparity test using SPSS v.17 was conducted after the result of one-sample Kolmogorov-Smirnov normality test had been obtained. If the distribution is normal (p>0.05), t-test for disparity; if the distribution is non-normal (p<0.05), Mann-Whitney Test (MW-test) for disparity. Significant disparity of variables if p<0.05.

The gender comparison on PCB variable has no significant disparity in every form of involvement (Table 3). Parents’ treatment was not given specifically to adolescents with certain gender. Male/female students received equal treatment. No research has been conducted in this area. Dietrich and Kracke (2007) found male students received more interference and less support compared to female students. Dustmann (2004) updated Santrock (2001) proposal that as cohort becomes more modern, traditional parenting that pays closer attention to sexual protection of female adolescents tends to be left behind. Education becomes higher and gender inequality is disappearing.

The gender comparison on vocational identity variable shows significant disparity in support and interference diagram patterns, while lack of engagement shows no significant disparity (Table 3). No research has been done in the area of vocational identity based on gender difference with subjects being conditioned to various forms of parents’ involvement in determining adolescents’ career. McCoy (2004), Khasawneh et al., (2007), Hirschi & Läge (2007) only found vocational identity of transition adolescents’ during career determination has no significant disparity between gender (parenting: support).

PCB condition is a complex family condition and not only focus on career problems at a given moment, instead during the whole development process of an individual since early age. Parenting climate will built up intensely.
and manifested through the response of a child to the complex parenting in the future. Thus, although there is a contradiction in the findings, significant disparity of vocational identity based on gender still takes place.

A difference in culture in regard to where this research took place could also be one of the reasons that caused result disparity between the findings here and the findings from previous research. According to Schwartz, Montgomery, and Briones (2006); one’s social identity can be formed through local culture and within its complexity, this will be adopted as personal identity in line with one’s development and growth in the given environment. Personal identity refers to individual purpose, faith and values which basically is a product of solidarity and interaction of the individual with social identity such as custom and tradition, ethics, and convension. Social identity forms an individual to adopt culture with individualistic system as seen in most of the Western world (America, Europe and Australia) or collective system as seen in most of the Eastern world (Asia, some part of the Middle East [Arabia, Israel, Turkey], and India).

Since the subjects in this research were Indonesians (Eastern country), collectivity played a role in shaping their vocational identity as part of personal identity of the individuals. Vocational identity of subjects with PCB support shows disparity based on gender, although there is no connection between PCB support and vocational identity. This is due to subjects’ consideration towards social aspects during internalization in life, even though the given social aspects are eventually personalized. There was the possibility of subjects building self-confidence related to the vocation they chose in regard to gender consideration factor. Collective system that shapes individual dependency on others (parents) makes subjects put faith on that statement, although subjects might not have taken the values they absorbed in the

| Variable       | Path pattern                | M/F       | N   | M     | p value and t value | Significance |
|----------------|----------------------------|-----------|-----|-------|--------------------|--------------|
|                |                            | M         | 124 | 158.14 | 0.52 -             | Not Sig.     |
|                |                            | F         | 199 | 164.40 |                    |              |
| Support        | N = 323                    | M         | 125 | 171.78 | 0.52 -             | Not Sig.     |
|                |                            | F         | 209 | 164.94 |                    |              |
| Interference   | N = 334                    | M         | 117 | 163.27 | 0.09 -             | Not Sig.     |
| Lack of        | engagement                 | F         | 191 | 149.13 |                    |              |
|                | N = 308                    | M         | 124 | 175.04 | 0.047 -            | Sig.         |
|                |                            | F         | 199 | 153.88 |                    |              |
| IV             | N = 334                    | M         | 125 | 182.33 | 0.03 -             | Sig.         |
|                |                            | F         | 209 | 158.63 |                    |              |
| Lack of        | engagement                 | M         | 117 | 166.13 | 0.07 -             | Not Sig.     |
|                | engagement                 | F         | 191 | 147.37 |                    |              |
|                | N = 308                    | M         | 124 | 135.47 | - 0.43 (t = -1.12) | Not Sig.     |
|                |                            | F         | 199 | 137.35 |                    |              |
| IV             | N = 334                    | M         | 125 | 135.30 | - 0.21 (t = -0.86) | Not Sig.     |
|                |                            | F         | 209 | 136.78 |                    |              |
| Lack of        | engagement                 | M         | 117 | 135.95 | - 0.30 (t = -1.61) | Not Sig.     |
|                | engagement                 | F         | 191 | 138.56 |                    |              |
|                | N = 308                    | M         | 124 | 135.47 | - 0.43 (t = -1.12) | Not Sig.     |
|                |                            | F         | 199 | 137.35 |                    |              |

Eveline, et al.

Tabel 3. Test Results of Disparity on Every Variable based on Gender

Makara Hubs-Asia

July 2015 | Vol. 19 | No. 1
given environment into consideration as objective and rational truth. On the other hand, in the Western countries (individualistic) such as USA (McCoy, 2004), Jordan (Khasawneh et al., 2007), Switzerland (Hirschi & Läge, 2007); male and female adolescents have more control over themselves and see themselves (identity and vocational) being isolated from the environment and being responsible of their own life and behavior. Equality among men and women is more well-established, which minimalizes vocational identity disparity among genders.

In the context of parents’ involvement complexity since early childhood of an individual in a family, we can see various implementations of parents’ view on early childhood parenting. Irrationality of gender role is one of them, due to family tradition. Vocational PCB support values of male adolescents are significantly higher (Table 3). There is the possibility of support condition inserting the elements of value, view, and habit of career behaviour based on irrationality of gender role that sticks with the previous generation (parents).

In addition, Levant in Satyadi (2001) argued that irrationality of gender role is construed by rigid, absolut, irrational ways of thinking in terms of seemingly individual ideal behavior as the society demanded fitting a gender. Irrationality of gender role can be formed by social learning in individual environment. Environmental condition, which forces the impression of certain gender having the upper hand over other gender, shapes individual belief confirming such thought due to judgement from the society. Those who are not able to play the standard role of a gender according to assessment from surroundings experience negative psychological consequences. In general, the proportion of judgement for male is heavier than females due to their masculinity in question. Females are more liberated to fail the norm demand of gender role. Society is more acceptance towards females’ masculinity compared to males’ femininity. Thus, individual tries to gain social acceptance by undertaking the irrationality s/he holds.

Gender role irrationality will gradually direct an individual to build self-concept upon gender role ratio. Sava, Maricuțoiu, Rusu, Măcșiniga, Vîrgă (2011) argued irrational self-beliefs have significant relationship with self-esteem (main asset for shaping self-concept). Therefore vocational identity as part of self-concept can be shaped in line with irrationality of gender role. Females tend to be belittled compared to males due to hegemonic masculinity that is often used to evaluate males’ successes when they fulfill the ideal standard set by the society (Levant in Satyadi, 2011).

The form of interference seen in Table 3 indicates that male adolescents have higher vocational identity, which is amplified by the significant relationship between PCB interference and vocational identity (Table 1).

It means PCB interference affects vocational identity and possibly enables the invasion of gender role irrationality element. Value, view, and habit of career behavior based on gender role irrationality of previous generation is more continuously intensive, which afterwards becomes the basis for parents to make adolescents follow the parents’ choice of career. By comparison, interference pattern has higher values on both genders. Interference pattern becomes more intensively invading adolescents compared to support pattern.

There is no vocational identity disparity for both genders in terms of lack of engagement (Table 3). Lack of engagement is different from the forms support and interference, which indicates parents’ involvement incurring vocational identity disparity related to gender on adolescents with the probability of gender role irrationality factor. The climate of lack of engagement entails a less or completely uncaring environment, ignorance about what happens to adolescents as well as the complexity of parents’ and adolescents’ isolation without clear guidance to adulthood. Santrock (2001) stated that the learning towards adulthood is more intensive during adolescence compared to other stages of development. If adolescents’ needs are not fulfilled within their family, they will seek the fulfillment from the society (external source). Afterwards, individuals will form social identity out of the complexity of the environment (culture, custom and tradition, culture, values, views, and habitual behaviour) which simultaneously becomes the standard of accepting and adopting the shaping elements of personal identity (vocational identity).

It cannot be denied that the phenomenon of gender role irrationality in the society invades personal identity through social identity. Physique, strength, power, and income are the things that males should possess compared to females. Adolescents have the chance to adapt with social norms so that no negative psychological consequence is taken in. However, external conditions turns out have weaker influence on adolescents’ vocational identity in regard to gender (Table 1). Subjects were still under the age of parents’ supervision, not yet fully independent. During transition age, parenting should not be disengaged completely (Santrock, 2001).

There seems to be no disparity on CDMP based on gender difference (Table 3), which is in accordance with Khasawneh et al., (2007) and McCoy (2004). Subjects in the late adolescence were more independent in terms of decision-making as self-determination develops (Bergen, 2006). Self-determination is one of the influencing factors in the process of independent decision-making and is claimed to bear no significant
disparity between male and female (Guérin, Bales, Sweet, & Fortier, 2012).

4. Conclusions

There are several conclusions that can be drawn from the findings, analysis and interpretation of this research: First, vocational identity can play a direct role in shaping the ability to determine career decisions of university students undergoing exploration-transition: 38.00% (support), 32.00% (interference), and 35.00% (lack of engagement). Secondly, every form of parents’ involvement in adolescents’ career decision-making can play a direct role in shaping the ability to determine career decisions of university students undergoing exploration-transition: 19.00% (support), -13.00% (interference), and -15.00% (lack of engagement). Thirdly, involvement in the forms of interference and lack of engagement contributes to vocational identity of adolescents undergoing exploration-transition (-23.00 and -15.00%). Fourthly, vocational identity has no role as a mediator in the relationship between parents’ involvement and the ability to determine a career of students undergoing exploration-transition. Fifthly, gender difference does not produce a disparity between the magnitude of parents’ involvement and the ability to determine career decisions of students undergoing exploration-transition in every interaction pattern of involvement, as well as vocational identity under the condition of lack of engagement; while vocational identity under the condition of support and interference shows a disparity between genders. Sixthly, the relationship model of the research should preferably be designed so that vocational identity and parents’ involvement pattern variables become a separate predictor as a factor that influences the ability to make career decisions variable. Each conclusion gained is based on normal data distribution with an overall subject description in each diagram pattern suggesting weak vocational identity, parents’ involvement interaction pattern in adolescents’ career, and the ability to determine career decisions (57.28, 57.50, and 56.81%), the majority of subjects experienced form of support (90.40%), and strong (86.23, 88.02, and 91.23%).

New domain found in this study reveals individual vocational identity in the age of exploration no longer mediates parents’ interaction pattern with respect to the ability of making career decisions. There is a need for further similar research having 15 to 17 years of age subjects or having a modified measurement fitting to the needs of subjects undergoing exploration-transition stage.

References

Arulmani, G., & Nag-Arulmani, S. (2004). Career counselling: A handbook. New Delhi, India: Tata McGraw Hill.
physical activity. *Canadian Psychology/Psychologie canadienne*, 53 (4), 291-300. DOI: 10.1037/a0030215.

Hirschi, A. (2012). Vocational identity trajectories: Differences in personality and development of well-being. *European Journal of Personality*, 26 (1), 2-12. DOI: 10.1002/per.812.

Hirschi, A., & Läge, D. (2007). The relation of secondary student’s career choice readiness to a six-phase model of career decision-making. *Journal of Career Development*, 34 (2), 164-191. DOI: 10.1177/0894845307307473.

Holland, J.L., Gottfredson, D.C., & Power, P.G. (1980). Some diagnostic scales for research in decision making and personality: identity, information, and barriers. *Journal of Personality and Social Psychology*, 39 (6), 1191-1200.

Jones, S. (2012). *Parental influence on young adults’ vocational choices*. Paper Online. University of Kentucky. Kentucky. Diakses pada tanggal 10 Mei 2013, http://www.uky.edu/~drlane/ssca12/jones.pdf.

Jungen, K.A. (2008). *Parental influence and career choice: How parents affect the career aspirations of their children*. Thesis. University of Wisconsin-Stout. Wisconsin.

Khasawneh, S., Khasawneh, L., Hailat, S., & Jawarneh, M. (2007). University students’ workforce: A study of vocational identity and career decision-making. *Mediterranean Journal of Educational Studies*, 12 (1), 27-42.

Komara, A. (2012). *Career identity through the college years*. Research Paper. York College of Pennsylvania. Pennsylvania. Diakses pada tanggal 30 Juni 2013, http://media.wix.com/ugd/8a7bb4_b7f9f68ed123a8fd1e08adbf954823e.pdf?dn=Career+Identity.pdf.

Lei, P.W., & Wu, Q. (2007). Introduction to structural equation modeling: Issues and practical consideration. *Educational Measurement: Issues and Practice*, 26 (3), 33-43. DOI: 10.1111/j.1745-3992.2007.00099.x.

Lindstrom, L., Doren, B., Metheny, J., Johnson, P., & Zane, C. (2007). Transition to employment: Role of the family in career development. *Council for Exceptional Children*, 73 (3), 348-366.

McCoy, T.A. (2004). *Vocational identity among transfer students: A descriptive study using the my vocational situation instrument*. Thesis. University of Maryland. Maryland.

Norris, T.L. (2008). *The Personal, career and learning skill needs of first year psychology students*. Thesis. The University of Fort Hare (East London Campus). London.

Nota, L., Ferrari, L., Solberg, V.S.H., & Soresi, S. (2007). Career search self-efficacy, family support, career indecision with Italian youth. *Journal of Career Assessment*, 15 (2), 181-193. DOI: 110.1177/1069072706298019.

Papalia, D.E., Wendkos-Olds, S.W., & Duskin-Feldman, R.D. (2007). *Human development* (10th ed.). Boston, MA: McGraw-Hill.

Reardon, R.C., & Lenz, J.G. (1999). Holland’s theory and career assessment. *Journal of Vocational Behavior*, 55, 102-113.

Romano, J.J. (2004). Dimension of parenting and identity development in late adolescence. Thesis. Virginia Polytechnic Institute and State University. Virginia.

Santrock, J.W. (2001). *Adolescence* (8th ed.). Dallas, TX: McGraw-Hill.

Santrock, J.W. (2002). *Life-span development (International ed.). New York, NY: McGraw-Hill.

Santrock, J.W. (2011). *Educational Psychology* (5th ed.). Boston, MA: McGraw-Hill.

Santoso, S. (2011). *Structural Equation Modeling (SEM): Konsep dan aplikasi dengan AMOS 18*. Jakarta: Elex Media Computindo.

Satyadi, H. (2011). *Irasionalitas peran jender, depresi maskulin, dan alexithymia pada suami sebagai faktor risiko perilaku kekerasan terhadap istri*. Disertasi. Universitas Indonesia. Depok.

Sava, F.A., Maricuțoiu, L.P., Rusu, S., Macsina, I., & Virgă, D. (2011). Implicit and explicit self-esteem and irrational beliefs. *Journal of Cognitive and Behavioral Psychotherapies*, 11 (1), 97-111.

Schwartz, S.J., Montgomery, M.J., & Briones, E. (2006). The role of identity in acculturation among immigrant people: Theoretical propotions, empirical questions, and applied recommendations. *Human Development*, 49, 1-30. DOI: 10.1159/000090300.

Smitina, A. (2009). Student’s risk to drop out and relation to vocational identity. Report from doctoral student of educational management. University of Latvia. Riga.

Super, D.E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior*, 16, 282-298.
Voitkane, S., & Miezite, S. (2006). The relationship of social support, psychological well-being, anxiety, depression, and student needs to self-esteem and assertiveness in first year university students. Publication of 19th international conference on the first-year experience, Toronto, Ontario, Canada, July 24-27, 2006. University of Latvia.

Walmsley, A., Wilson, T., & Morgan, C. Influences on a college student’s major: A developmental perspective. *Journal for the Liberal Arts and Science, 14* (2), 25-46.