

SYSTEMATIC REVIEW: QUALITY CRITERIA IN THE VOCATIONAL ORIENTATION PROGRAMS PROJECT

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ABSTRACT

The present investigation explores the design of vocational guidance programs for formal education at the secondary level, to address the lack of an effective vocational guidance program suited to the sociodemographic conditions of the student population. The objective was to develop a critical synthesis of the scientific literature related to vocational and professional orientation, through applied research based on the systematic review methodology. From the analysis, it was concluded that there are essential actions in professional orientation programs to determine high levels of quality: to offer information about academic supply and labor demand, to develop occupational profiles of different careers, to offer information on interests, aptitudes and preferences, carry out training in decision making, link to the primary support group, provide strategies for the development of self-efficacy and vocational maturity, support the use of ICTs, provide strategies for the transition, prioritize the role of mentor and peers, establish a project or life plan, counting on a theoretical foundation and developing a constant evaluation of the vocational programs, during the different stages of the life cycle.

Keywords: vocational guidance; dropouts; higher education; career orientation

Revisión sistemática: criterios de calidad en el proyecto de programas de orientación vocacional

RESUMEN

La presente investigación exploró el diseño de programas de orientación vocacional para educación formal en el nivel secundario, para resolver la carencia de un programa de orientación vocacional efectivo y adecuado a las condiciones sociodemográficas de la población estudiantil. El objetivo fue desarrollar una síntesis crítica de la literatura científica relacionada a la orientación vocacional y profesional, mediante investigación aplicada a partir de la metodología de revisión sistemática. A partir del análisis, se concluyó que son acciones esenciales en los programas de orientación profesional para determinar altos niveles de calidad: ofrecer información sobre oferta académica y demanda laboral, desarrollar perfiles ocupacionales de las diferentes carreras, ofrecer información sobre intereses, aptitudes y preferencias, realizar entrenamiento en toma de decisiones, vincular al grupo de apoyo primario, proveer estrategias para el desarrollo de la autoeficacia y madurez vocacional, apoyarse en el uso de las TICs, proveer estrategias para la transición, priorizar el rol del orientador y los pares, establecer un proyecto o plan de vida, contar con un fundamento teórico y desarrollar evaluación constante de los programas. Con la intención de reducir la tasa de deserción universitaria y promover el desarrollo humano, se sugiere la aplicación de esos criterios en programas vocacionales desarrollados a largo plazo, durante las distintas etapas del ciclo de vida.

Palabras clave: orientación vocacional; evasión; educación superior, orientación de carrera

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Revisão sistemática: critérios de qualidade no projeto de programas de orientação vocacional

RESUMO

A presente investigação pesquisou a concepção de programas de orientação vocacional para a educação formal no nível secundário, visando resolver a carência de um programa de orientação vocacional efetivo e adequado às condições sociodemográficas da população estudantil. O objetivo foi desenvolver uma síntese crítica da literatura científica relacionada à orientação vocacional e profissional, mediante investigação aplicada a partir da metodologia de revisão sistemática. A partir da análise, concluiu-se que são ações essenciais nos programas de orientação profissional para determinar altos níveis de qualidade: oferecer informação sobre oferta acadêmica e demanda laboral, desenvolver perfis ocupacionais das diferentes carreiras, oferecer informação sobre interesses, aptidões e preferências, realizar treinamento em tomada de decisões, vincular-se ao grupo de apoio principal, prover estratégias para o desenvolvimento da autoeficácia e maturidade vocacional, apoiar-se no uso de TICs, prover estratégias para a transição, priorizar o papel do orientador e dos pares, estabelecer um projeto ou plano de vida, contar com um fundamento teórico e promover avaliação constante dos programas. Com a intenção de reduzir a taxa de evasão universitária e promover o desenvolvimento humano, sugere-se a aplicação desses critérios em programas vocacionais realizados a longo prazo, durante as distintas etapas do ciclo de vida.

Palavras-chave: orientação vocacional; evasão; ensino superior; orientação de carreira

INTRODUCTION

In recent years, despite knowing the long-term benefits of vocational guidance and its correspondence with self-realization, guidance practice has been changing, establishing its application for a unique moment in the life cycle, precisely during the year end of secondary education, addressing the need to choose a profession or career after graduating from high school (Moura & Facci, 2016). However, the ideal from the perspective of the authors implies that vocational guidance is a long-term process, which includes all the dimensions of development, promoting protective factors to establish a life project and assume the responsibilities and conflicts that emerge before occupational performance (Álvarez-Maestre, 2020; Tractenberg, Streumer, & van Zolingen, 2002).

And it is that, in the face of poor vocational guidance, risk factors are increased, with probabilities of affecting mental, socio-emotional and physical health (Santana Vega, Feliciano Garcia, & Santana Lorenza, 2013). Therefore, an imprecise or null vocational orientation can affect the training process, thus affecting the socioeconomic development of the individual. For example, in the academic field, various investigations relate poor vocational guidance as one of the factors associated with university dropout (Silva, 2016; Tinto, 2006). The phenomenon of university dropout causes significant damage, where the individual assumes debts that he will not be able to pay later, or is frustrated by the obstruction of his life project (Pérez-Fuentes & Álvarez-Maestre, 2021; Romo & Hernández, 2005).

It is due to this last concern that this research arose, as a response to a specific problem in the Commonwealth of Puerto Rico, a territory of the United States of America. After an exhaustive review of the

problem, it was possible to identify that vocational guidance had a relationship with the high level of university dropout, and therefore an obstruction in personal self-realization. The context of the problem implied that, despite the existence of a school orientation and counseling program of the Department of Education of Puerto Rico, the dropout and university failure rates were calculated at a significant level.

A study by the Council of Higher Education (CES) of Puerto Rico reveals that for public universities, 41% of students complete their baccalaureate. For the private university, the data is 22% or seen in another way, one in five manages to complete their high school studies. In total, the study reveals that only 31% of the university population is finishing their undergraduate degree at the end of 6 years, which consists of three statutory years (Rodríguez, 2010).

However, the economic conditions of students in Puerto Rico are different from other countries in Latin America. Puerto Ricans, like other American citizens, have a non-reimbursable expenses item for undergraduate studies called the Pell Grant. This favorable element distorts the economic factor as the cause of desertion. Regarding economic aspects, Puerto Rican students have easy access, but not an effective orientation to stay within the selected area (Vázquez, 2014). Various analyzes of Latin American countries have agreed that the most important factor and one that could lessen the effects of dropping out is to have adequate professional or vocational guidance during secondary school (Universia, 2013).

The different reports and statistics are evidence that the problem situation in terms of university dropout and deficiency in vocational guidance has been maintained, at least, during the last five years. In this

sense, providing an effective solution to this problem is essential considering that the future and life project of the approximately 30,000 students who graduate from high school each year and the more than 100,000 new admissions to high school are at stake post-secondary institutions, both university and non-university (CEPR, 2014; El Nuevo Día, 2015).

METHOD

A systematic review design was carried out in this research, performing an analysis of the publication on models and programs designed for similar populations. In the first phase, the quality of the studies was established and later, through categories, a meaning was given to the data, to finally identify the essential elements for the construction of vocational guidance programs with quality criteria (Sánchez-Meca, 2010).

Data Collection Techniques or Instruments

The phases that were taken into account for this research are the following (Sánchez-Meca, 2010):

1. Formulation of the problem: What are the quality criteria required for the design and application of vocational guidance programs in public and private education in Puerto Rico?

What are the general guidelines that facilitate the construction of a vocational and professional orientation model, responding to the educational and sociocultural needs of the Puerto Rican population in secondary school, to guarantee university academic success?

2. Definition of the selection criteria for studies that examined career guidance programs in secondary education:

Design: quantitative, qualitative or mixed studies were collected.

Categories: studies that contained data about vocational or career guidance models, programs or designs. Similarly, the concepts of vocational counseling, guidance services, vocational choice, vocational information, vocational guidance were searched.

The search fields used were: all text, title, subject terms. At first, the exact search was used using quotes. Subsequently to refine the search, the Boolean and and or were used. Also, the Boolean not was used, in order to exclude unrelated or out-of-context research.

Participants: studies about vocational guidance in secondary school students.

Language: studies written in Spanish and English.

Temporal range: studies conducted between 2007 and 2017.

Exclusion: research in primary school population, post-secondary, university students or vocational rehabilitation was not taken into consideration.

Bibliographic search of research, with the categories set out above, in electronic databases such as ProQuest, EBSCOhost, Redalyc, Dialnet, Cengage Learning, ERIC, Springer, WOS, Elsevier, Scopus, JURN, Teseo, Scielo, World Wide Science, ASSIA, Google Scholar. All of the above databases provided by the Alvin Sherman Library, Research and Information Technology Center interface.

Instruments. Recording of data and evaluation of the quality of the selected studies

In this stage, a table-format instrument was used for the registration, which includes the classifications of authors and date of publication, type of design, participating subjects, data collection instruments, data analysis and conclusions (Figure 1). To validate the quality of the studies, the Eligibility Criteria Instrument for the selection of IMeCi research articles (Gómez-Ortega, 2015) was used, an instrument specially validated for use in systematic review and meta-analysis type research (Figure 2). Gómez-Ortega (2015) explains that an objective critical reading requires the implementation of a valid instrument, this allows determining the relevance of the studies to be included in the systematic review.

Analysis of data

In this last stage of the methodological design, content analysis was used. Thus, the main process of analysis would be qualitative coding through the identification of units of meaning, creating categories and classifying them (Sánchez-Meca & Botella, 2010).

Sample selection

In the first place, the search for publications on vocational guidance programs was developed with the search criteria established in the different databases, as determined in the methodology (Figure 3).

After the search for a period of one year, starting

Figure 1 Instrument for data recording.

Study Records Table				
Topics, authors and date	Method	Participating subjects	Quantity IMeCi score	Results

Source: Prepared by the authors

Figure 2 IMeCI Instrument.

Instrument of eligibility criteria for the selection of the articles of Research for Meta-Analysis- -IMeCI				
Reference:				
Search database :	ID from the article :			
1 Key general guidelines to evaluate		Yes	No	It does not apply
1.1 The article responds to :				
a. Publication in Indexed journal in ISI web or Scopus				
b. Journal publication Indexed in one of the following databases: MEDLINE, Embase, Academic Search, E-Journal, Psyc-Articles, CINHAL, Scielo, OVID, Science Direct or Pubindex categories A1 or A2				
c. Publication in a journal Indexed in a database different from those previously enunciated. Which?				
d. Another type of publication not published in an indexed journal: (Mark with an "x", the corresponding answer among the following options): Master's Thesis Doctoral thesis Institutional Research Research paper presented by a group of experts in the area				
1.2 Before to its publication, the article was subject to peer review or editorial committees.				
1.3 The scientific language used is clear, concise and precise.				
1.4 Avoid the use of abbreviations and acronyms in the article (If used, it corresponds to the accepted				
2 Guidelines to evaluate the title		Yes	No	It does not apply
2.1 Identify the research phenomenon(s) and the main variables of the study				
2.2 Identify the keywords of the studio				
3 Guidelines for evaluating authors		Yes	No	It does not apply
3.1 Contains clear information for each individual (full name)				
3.2 Inform electronic address or contact post of the researcher responsible for the publica-tion.				

Source: Gómez-Ortega (2015)

from the construction of the literature review until June 1, 2017, 90 potential scientific publications related to the topic were identified (figure 3) and then, they highlighted 45 of them that seemed to meet the search criteria. When carrying out an exhaustive reading of the publications, it was possible to show that only 23 strictly complied with the population criteria (high school students) and type of work carried out (vocational guidance program or design in secondary school). Subsequently, the IMeCI instrument was applied, a process in which only 11 publications were classified within the quality criteria. Next, Figure 4 presents the data of the 11 investigations with an IMeCI percentage above 70%.

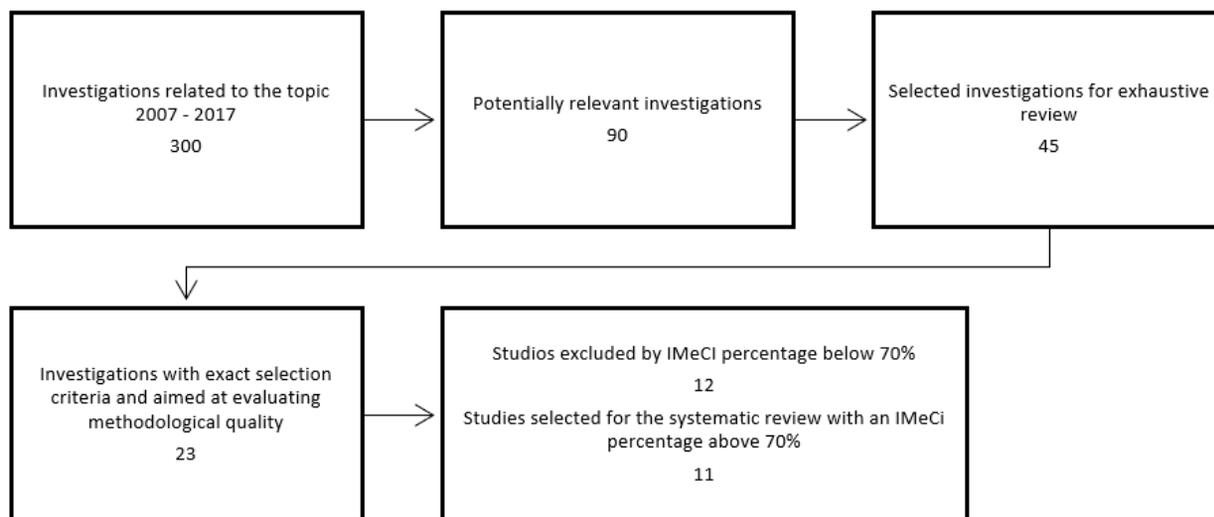
RESULTS

This section presents the results obtained from the systematization of the investigations related in figure 4. It should be noted that the results obtained were put into discussion with the theory collected in the referential framework of the investigation.

Development Stage

In the analyzed investigations, it was possible to identify a greater tendency to the application of vocational guidance programs during secondary education, with a greater focus on the last grades of training. The position for the selection of this age is that, at this stage of the life cycle, late adolescence,

Figure 3 Item Selection Flowchart.



Source: Prepared by the authors

the conditions of development have been generated to assume responsibilities regarding the life project. Among them, cognitive, socio-emotional and physical development. This is how this statement fits what was expressed by López Bonelli (2003) where this stage is considered ideal, assuming that there is a developed adaptive behavioral repertoire and the level of maturity essential for the professional or vocational selection approach (Pacori, Pacori, & Atencio, 2016; Santana Vega, Feliciano Garcia, & Santana Lorenza, 2013).

It is also true that since secondary school is the last level of formal school education, it is necessary to provide a horizon for the student at the time of graduation, to ensure the satisfaction of the student's self-realization needs and that, in its later stage, adulthood, be useful to society. Although the selection of the age of application is related to the levels of maturity developed, the results of the analysis show the need for guidance from the earliest years, to direct the vocation and the development of skills according to interests.

Academic Offer

All the studies reviewed concluded that it is a necessary element in the design of a vocational guidance program to provide the student with information about the academic offer in different institutions, the minimum requirements for admission to them and all that detailed information that supports conscientious decision-making (Álvarez Pérez, López Aguilar, Santiviago Ansuberro, Rubio, & Da Re, 2016; Santana Vega, García, & Cruz González, 2010).

In the results of the longitudinal study by Aisenson et al. (2010), the positive impact generated by information about the academic offer in decision-making is

demonstrated. And it is that there is a clear relationship between misinformation and university dropout, as explained by Rodríguez Lagunas and Leyva Piña (2007), who also hold higher education entities responsible for updating their training offers, so that they adjust to current demands of the society. Added to this is that timely information about the academic offer for decision-making, before entering the university, helps in the prognosis of academic success, easy adaptation and improvement in university retention rates.

Labor demand

As an aspect related to the academic offer, it is considered appropriate to generate an impact on decision-making, seeking accurate information about their labor demands. Bearing in mind that one objective of orientation is to guarantee a future job for the student, it will be essential to establish for his discernment which careers are in greatest demand and in which areas, likewise, which have lost labor force and which represent future opportunities according to social advances. (Aisenson et al., 2010; Camarena Gómez, González Lomeli, & Velarde Hernández, 2009; Santana et al., 2010). On the other hand, although the concept of a career's reputation is important at the time of decision-making, it is not an absolute determinant for its choice, since different elements of judgment are involved, such as the search for family approval, economic well-being, the vocation of service, among others.

Occupational profile

As for this category, it is essential to create profiles that include the knowledge, skills and requirements that the student must have in order to guarantee academic success during their studies and subsequently success

Figure 4 Research with IMeCI Instrument Quality Score.

Subjects, authors and date	Method	Participants	Amount Score IMeCi
Adaptabilidad y expectativas em orientación vocacional (Álvarez, López, Santiviago, Rubio, Da Re, 2016)	Mixed approach Data collection by questionnaire Analysis by SPSS and Atlas –T.	300 secondary school students from Spain, Italy and Uruguay.	53 items 94,6%
Elécción y toma de decisiones (Pacori, Pacori, & Atencio, 2016)	Quasi-experimental longitudinal cut qualitative approach. Data collection by CHASIDE Test and control group. Analysis by correlated samples test	187 fifth-year students of Juliaca secondary school in Peru.	56 items 100%
Impacto de programas de orientación vocacional(Botello,2014)	Qualitative approach Data collection by national test and database Data analysis by discrete choice model	229 thousand secondary school students who took the SABER test in Colombia from 2009 to 2012.	52 items 92,8%
Madurez y autoeficacia vocacional (Santana, Feliciano & Santana, 2013)	Qualitative approach. Data collection by COAL and CMC questionnaire Analysis by ANOVA	171 students studying 3rd and 4th ESO Baccaulaureate and Intermediate and Higher Level Training Cycles in a Secondary School on the island of Tenerife, Spain.	54 items 96,4%
Intereses, aptitudes y preferencias vocacionales en la elección de carrera (De León & Briones, 2012)	Correlational exploratory type qualitative approach. Collection of data by inventory of interests and inventory of aptitudes Aptitude analysis. Data analysis by Spearman's correlation coefficient, with SAS software	214 students from a vocational high school center in La Partida, Coahuila-Mexico	54 items 96,4%
Orientación educativa y socio laboral desde la toma de decisiones (Santana, García, & Cruz, 2010)	Mixed approach. Action research method. Data collection by social and labor orientation evaluation questionnaire, individual interview, group interview.	76 students from 3rd and 4th ESO, four tutors, five teachers and one counselor from a secondary school on the island of Tenerife, Spain	56 items 100%
Orientación vocacional en grupo (Aisenson et al., 2010)	Mixed approach. Exploratory and longitudinal study. Data collection by survey of open and closed questions. Analysis by SPSS and category analysis.	122 high school students who received guidance services from the Student Guidance Office of the University of Buenos Aires	52 items 92,8%
Orientación vocacional por aplicación multimedia (Guerra, Simón, & Hidalgo, 2010)	Mixed approach. Data collection by structured interview and IPVCE questionnaire Analysis by SPSS and category analysis.	66 subjects, 11 teachers and 55 high school students in the provinces of Sancti Spiritus, Vila Clara and Cienfuegos in Cuba	52 items 92,8%
Programa de orientación educativa para la elección de carrera (Camarena, González, & Velarde, 2009)	Qualitative approach. Data collection through documents and materials corresponding to the Educational Guidance Program. Data analysis by documentary analysis and categories.	It does not apply	50 items 89,2%
Procesos de orientación escolar y la toma de decisiones vocacionales (Ferández, Peña, Viñuela, & Torío, 2007)	Qualitative approach. Data collection by questionnaire Analysis by SPSS	2,260 students in the last year of ESO from different schools in the Principality of Asturias, Spain.	52 items 92,8%
Madurez Vocacional y autoeficacia (Merino 2007.	Qualitative approach. Experimental by control group. Data collection by Vocational Maturity Questionnaire and the Vocational Self-Efficacy Scale Data analysis by Wilcoxon Z test and Chi-Square analysis with the Kruskal-Wallis test.	179 ESO students, 90 in the experimental group and 89 in the control group	56 items 100%

in the exercise of their vocation (Guerra Rubio, Simón Brito, & Hidalgo Abellé, 2010; De León Mendoza & Briones de León, 2012). Such knowledge is in line with the development of self-efficacy and having a high level of compliance with the requirements of the profile, and can lead to motivational maintenance of higher education, outstanding academic performance, graduation guarantees and continuity in the life project. (González Fiegehen, 2006).

Then, the student will be able to adjust their interests and potentialities to the content of said profiles and evaluate their probability of success. In case of not having the physical and cognitive conditions, the program can offer exercises to promote their development. Although the profile design can facilitate adaptation and seek levels of success in the acquisition of theoretical and practical knowledge of the selected career, Donoso and Gazo (2007) differ in that their sole objective is to adjust these profiles for occupational success, they must also prepare for the constant updating regarding the demands of the environment, adaptation to job changes, among other vicissitudes associated with the world of work.

Vocational Interests, Aptitudes and Preferences

Most of the analyzed investigations gave relevance to the identification of the interests felt by the students. Along with their preferences, it was also necessary to identify their skills and those preferences related to the development of a vocation (Camarena Gómez et al., 2009; De León Mendoza & Briones de León, 2012; Pacori et al., 2016). These three factors, although interrelated, are not the same, since, although the student is interested in a particular vocation, it does not mean that he has the basic aptitudes for its execution, and vice versa. However, the identification of indicators on interests or abilities can focus the student's decision-making assuming what is their possible range of action, feasible and likely to succeed. The preferred techniques are standardized vocational tests, psychometric and personality tests or self-knowledge exercises such as interviews and self-assessments.

At the beginning of vocational guidance, Ginzberg (1972) and Holland (1997) focused their studies on the identification and measurement of vocational or occupational preferences, understanding their relationship with career choice. To correspond to these searches, self-knowledge activities, tests and self-assessments were designed. These strategies continue to be applied today, showing a high level of impact in the final evaluation of the programs.

Decision Making Training

This category can be considered the crucial aspect in career selection, based on the fact that an adequate decision-making exercise can lead to the satisfaction of

vocational factors and future life project. The findings of the reviewed publications suggest that the orientation approach should seek to strengthen decision-making capacity (Pacori, Pacori, & Atencio, 2016; Santana Vega et al., 2010). In this regard, vocational guidance must attack those problems related to indecision, including lack of self-knowledge, lack of determination, lack of method for decision-making, lack of information, external barriers and dysfunctional beliefs.

On the other hand, it was possible to identify in the studies the need for a gender approach for the decision-making process, because, although marked differences in the impact of orientation between genders were not evidenced, the literature review identifies elements of judgment that they perform both genders and are imposed on the choice of career, such as occupations are considered more for men or women, or occupations that at the time of labor execution have presented cases of discrimination or where salaries are not equated between the sexes.

Family Bonding

The research findings were able to inform about the influence exerted by third parties on the students' decision. Family expectations, generations within the same vocation or family businesses, are sometimes a reinforcement in the career selection of individuals and those orientation programs that only focus on interests and aptitudes, academic offer and labor demand, are leaving aside an essential aspect that intervenes in student satisfaction in their vocational choice (Guerra Rubio et al., 2010; Pacori et al., 2016).

The problems that can be generated as a result of family influence on decisions include the selection of a career for which the individual does not like, or does not have the occupational profile for its fulfillment, later the motivation in the studies is reduced, causing low academic performance, dissatisfaction and university dropout (González Fiegehen, 2006). It is for this reason that, in the search for a guidance program, guidance strategies should be considered for families and their possible influence on student decisions. Likewise, explain to the student that their decisions can be influenced by other significant people (friends, partner, parents, siblings, teachers) and provide them with the tools to establish priorities regarding their own psychological needs over those of third parties (War Rubio et al., 2010).

Vocational Maturity and Self-Efficacy

The design of an adequate vocational program, according to the findings, must also have tools for the development of vocational maturity and self-efficacy. The results of the research analyzed showed that these two traits are not interdependent factors, and the development of one can be achieved without the other.

However, it is essential that both exist for the exercise of vocational decision-making, subsequent application of the choice and prognosis of success (Santana Vega et al., 2013). Vocational maturity does not always occur as evolutionary progress, its increase depends on the experiences of the individual, their capacity for self-knowledge, planning capacity and ability to face decisions, elements that the orientation program must cover to strengthen their development.

To the extent that an individual develops self-efficacy, that is, feels capable of responding to the demands of the chosen profession, their chances of success and satisfaction with the choice will be high. In the search for self-efficacy, vocational selection programs can provide training spaces on the vocation of interest in support of occupational profiles. In the long-term process of OV, it will be contributing to the development of the vocational cognitions system, understanding its key function in the identification of aptitudes, interests, self-efficacy, self-image and the relationship of these with the information provided by the environment about careers and the implementation.

Technology

The benefits of technological means in the application of vocational programs range from easy and fast handling of information in applied tests, positive interaction of students with multimedia resources, effective assimilation of content, promotion of content to more members of the system school and the primary support group, active participation for motivation in reviewing digital content, among others (De León Mendoza & Briones de León, 2012; Guerra Rubio et al., 2010). The findings of the analysis suggest that providing information through multimedia generates an impact on receptivity, providing broad coverage of various topics that facilitate decision-making.

Transition Strategies

The results of the investigations also expressed their agreement that an effective orientation program should have a space to provide the student with cognitive, behavioral and emotional resources that allow him to adapt to the transition from secondary education to higher education and also to the later world of work (Álvarez Pérez et al., 2016; Santana Vega et al., 2010). Camarena Gómez et al. (2009) warns that there are emotional factors that are involved in decision making, therefore, by including it in the contents of a vocational program, an attempt is made to reduce the effects caused by anxiety and indecision.

Counselor and Peer Support

Perry and Shannon (2016) determined from their research on high school students, the positive influence that the role of the counselor has on their vocational decisions. This same topic is also addressed by Pineda-

Baez, Pedraza-Ortiz and Moreno (2011) explaining that the role of the counselor is essential as a character that facilitates the exploration of self-knowledge and actively participates in planning by providing the tools for vocational expression. In the findings of the review, conceptions similar to those expressed previously are identified, where it is concluded that vocational guidance without the intervention of a counselor trained for it, would not have the same impact as that if it is trained by the vocational counselor (Santana Vega et al., 2010).

Although it is essential to limit that the role of the counselor is not directive, but rather has the management approach, communicator and cooperation with the vocational intentions of the student and the environment that surrounds him, for a better performance in decision making. However, the theory did not provide information on differences in counseling outcomes at the individual or group level. In the systematic review, some students identified significant changes when participating in programs where peer or group work facilitated discussion, reflection, and identification. Likewise, the acquisition of essential tools to plan the life project and facilitate the transition was favored (Aisenso et al., 2010).

Project or Life Plan

The above categories would not achieve the desired effect if the vocational program handles these aspects in isolation without linking it to a life plan or project. The findings of the review indicate that the programs must contribute to the construction of a clarified, detailed and established plan based on the knowledge of all the categories previously raised, where the expectations and objectives in the short, medium and long are set out chronologically term, that is, to establish the path to follow after graduating from secondary education.

The findings relate satisfaction and quality of life with an organized life project. The life project and the vocational plan, as mentioned in previous sections, are not static, but their approach serves as a tool for locating the individual on their goals, maintaining motivation and adaptation, also giving space for the respective moments of adjustment. before emerging transitions due to unexpected changes (Álvarez Pérez et al., 2016; De León Mendoza & Briones de León, 2012).

Evaluation

Like any rigorous methodological process, the planning and application of vocational guidance programs must also have constant evaluation techniques of their contents and the impact generated, since the guidance must be kept in line with the reality of the students and verify that they do not there are gaps in their care (Camarena Gómez et al., 2009; Santana Vega et al., 2010). In this way, the guidance programs should

also have a theoretical foundation from the different existing approaches, where the benefits of each approach are taken advantage of and the intervention is promoted from a comprehensive model that is as comprehensive as possible.

CONCLUSIONS

It can be said at a general level that the objectives proposed for this research were achieved, where through the systematic review methodology, research with the theme of vocational guidance was analyzed and essential criteria were identified for the methodological design of impact vocational guidance programs significant to the population. Again, as in other research about the subject, the relevance of vocational, occupational or professional guidance in human development during the secondary school stage as a prevention method to minimize high levels of university dropouts is reiterated.

From the analysis it was possible to conclude that the following are essential elements to take into account in the construction of vocational guidance programs, to determine high levels of quality: offer information about academic offer and labor demand, develop occupational profiles of the different careers, offer information on interests, aptitudes and preferences, carry out training in decision-making, link the primary support group, provide strategies for the development of self-efficacy and vocational maturity, support each other in the use of ICT, provide strategies for the transition, prioritize the role of the counselor and peers, establish a project or life plan, have a theoretical foundation and develop constant evaluation of the programs.

There is no single model that is functional to a specific population, since the design of the program depends on the elements mentioned above in constant dialogue with the reality of the students and the socioeconomic dynamics experienced by the population. Therefore, the programs cannot be applied equally year after year, but as a result of constant review they will tend to be restructured as many times as necessary.

A particular element evidenced in most of the programs is their limitation in the target population, that is, it only covers the participation of students. This research highlights that, taking into account the high level of influence that family members and significant others have on students' decision-making, they should also be involved in the vocational guidance process. A vocational program that encourages family participation and promotes student decisions having control over the expectations of others, will experience a greater impact on the assertive selection and planning of the life project.

The vocational program must be developed throughout life as an essential process of human development. However, in the early years, the activity

will focus on the formation of protective factors such as self-esteem, decision-making, vocational maturity, cognitive development and self-knowledge, which help counteract other phenomena that affect compliance with the project such as drug addiction, teen pregnancy, school dropout, or poor academic performance. At later ages such as early and late adolescence, the focus will be on the vocational or occupational process directly, where interest and skills are ratified in relation to occupational profiles, in order to participate in spaces and activities for the development of potentialities in favor of scope of vocational preferences. And finally, to arrive at the vocational decision-making approach and the life project approach.

Prospective

This research provides relevant information for professionals in the area of education, mental health and other social sciences who are interested in the development of vocational guidance. The subject treated in this study is fundamental for human development, and during its planning, execution and conclusion it has been thought to improve the students' life quality at the secondary level, at the university level and later in their work performance.

This document analyzed the issues related to an adequate professional orientation and the negative implications in the life of the human being by not having it. This study also provides the guidelines by which a Department or Secretary of Education at the government level, private or public school, Higher Education Institution, school counselor or psychologist, can systematically organize and with quality characteristics a vocational guidance program that meets the prevailing needs of students, reducing in the future cases of university dropouts related to occupational disinformation.

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