A systematic review of factors that influence youths career choices - the role of culture

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PAT wrote the article. TIE, DL, BMA and PAT critically appraised the literature. TIE, DL and KT reviewed and edited the article. All authors read and approved the final manuscript for submission.

Keywords

Career choices, Youths, collectivist culture, Individualistic culture, Cross-cultures

Abstract

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A systematic review strategy using the Joana Briggs Institute’s format was conducted. The ERIC, PsychInfo, Scopus and Informit Platform databases were searched for articles published between January 1997 and May 2018. A total of 30 articles were included in the review, findings revealed that youth from collectivist cultures were mainly influenced by family expectations, whereby higher career congruence with parents increased career confidence and self-efficacy. Personal interest was highlighted as the major factor that influenced career choice in individualistic settings, and the youth were more independent in their career decision making. Bicultural youth who were more acculturated to their host countries were more intrinsically motivated in their career decision making.

Further research is imperative to guide the understanding of parental influence and diversity, particularly for bicultural youths’ career prospects and their ability to use the resources available in their new environments to attain meaningful future career goals.

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Introduction

Career choice is a significant issue in the developmental life of youths because it is reported to be associated with positive as well as harmful psychological, physical and socio-economic inequalities that persist well beyond the youthful age into an individual’s adult life (1, 2). The term “youth” is described by the United Nations Educational Scientific and Cultural Organisation (UNESCO) as a more fluid category than a fixed age group and it refers to young people within the period of transitioning from the dependence of childhood to adulthood independence and awareness of their interdependence as members of a community (3).

The complexity of career decision-making increases as age increases (4). Younger children are more likely to offer answers about their ideal career which may represent their envisioned utopia and phenomenal perceptions about what they want to do when they grow up (5). As children get older, they are more likely to describe their career choice as a dynamic interplay of their developmental stages and the prevailing environmental circumstances (5). Youth career decision-making is required to go through a process of understanding by defining what they want to do and exploring a variety of career options with the aid of guidance and planning (6). Proper handling of the process affirms individual identity and fosters wellbeing, job satisfaction and stability (7).

Many theoretical models have been proposed to explain the process of career development and decision-making, one of which is the Social Cognitive Career Theory (SCCT) by Lent, Brown, and Hackett (1994)(8). According to the SCCT, career development behaviours are affected by three social cognitive processes - self-efficacy beliefs, outcome expectations and career goals and intentions which interplay with ethnicity, culture, gender, socio-economic status, social support, and any perceived barriers to shape a person’s educational and career trajectories (9, 10). This emphasises the complex interplay between the personal aspirations of youths in their career choices and decision-making and the external influences which act upon them. Carpenter and Foster (1977) postulated that the earlier experiences and influences which individuals are exposed to form the bedrock of how they conceive their career aspirations(11). These authors’ assertion lends support to the tenets of SCCT and they have developed a three-dimensional framework to classify the factors that influence career choice. Carpenter and Foster proposed that all career-influencing factors derive from either intrinsic, extrinsic or interpersonal dimensions. They referred to the intrinsic dimension as a set of interests related to a profession and its role in society. Extrinsic refers to the desire for social recognition and security.
meanwhile the interpersonal dimension is connected to the influence of others such as family, friends and teachers (11).

Further exploration by other researchers reveal that youth who are motivated by intrinsic factors are driven by their interests in certain professions, and employments that are personally satisfying (7, 12). Therefore, intrinsic factors relate to decisions emanating from self, and the actions that follow are stimulated by interest, enjoyment, curiosity or pleasure and they include personality traits, job satisfaction, advancement in career and learning experiences (7, 13, 14).

Extrinsic factors revolve around external regulations and the benefits associated with certain occupations (15). Prestigious occupations, availability of jobs and well-paying employments have also been reported to motivate youth career decision-making (13). Consequently, extrinsically motivated youth may choose their career based on the fringe benefits associated with a particular profession such as financial remuneration, job security, job accessibility and satisfaction (13, 16, 17). Interpersonal factors encompass the activities of agents of socialisation in one’s life and these include the influence of family members, teachers/educators, peers and societal responsibilities (12, 18, 19). Beynon et al. reported that Chinese-Canadian students’ focus in selecting a career was to bring honour to the family (20).

Students who are influenced by interpersonal factors highly value the opinions of family members and significant others; they therefore consult with and depend on these people and are willing to compromise their personal interest (21).

Studies have shown that cultural values have an impact on the factors that influence the career choices of youths (22-26). Culture is the collective programming of the mind that distinguishes one group of people from another (Hofstede, 2001, p.9)(27). Hofstede’s (1980) seminal work on culture dimensions identified four major cultural dimensions in his forty-country comparative research (28). The first dimension is known as ‘individualism-collectivism.’ In individualistic cultures, an individual is perceived as an ‘independent entity,’ whilst in collectivistic cultures he/she is perceived as an ‘interdependent entity’. That said, decision-making in individualistic cultures are based on individuals ‘own wishes and desires, whilst in collectivistic cultures, decisions are made jointly with the ‘in-group’ (such as family, significant others and peers), and the primary objective is to optimize the group’s benefit. The second dimension is power distance. In high power distant cultures; power inequality in society and its organizations exist and is accepted. The third dimension - uncertainty avoidance denotes the extent to which uncertainty and ambiguity is tolerated in society. In high uncertainty avoidant cultures, it is less tolerated, whereas in low uncertainty avoidant cultures
it is more tolerated. Lastly, masculinity and femininity dimension deals with the prevailing values and priorities. In masculine cultures, achievement and accumulation of wealth is valued and strongly encouraged; in feminine cultures, maintaining good interpersonal relationships is the priority.

In his later work on “Cultural Dimension Scores”, Hofstede suggested that countries’ score on power distance, individualism, masculinity, uncertainty avoidance, long-term orientation and indulgence depicts whether they are collectivist inclined or individualistic-oriented (29). Countries that espoused collectivist values may score low and countries that are entrenched in individualistic values may score high on the above-mentioned six cultural dimension score models (27-29). This model aids the characterisation of countries into either individualistic or collectivist cultural settings.

On this basis, western countries like Australia, United Kingdom (UK) and the United States of America (USA) have been shown to align with individualism and such cultures are oriented around independence, self-reliance, freedom and individual autonomy; while African and Asian nations align more closely with collectivism in which people identify with societal interdependence and communal benefits (28, 30). Research indicates that basing cultures on individualistic versus collectivist dimensions may explain the classical differences in career decision-making among youths (30-32). The normative practice in individualistic societies is for the youth to be encouraged to choose their own careers and develop competency in establishing a career path for themselves, while youths from collectivist societies may be required to conform to familial and societal standards and they are often expected to follow a pre-determined career track (33).

The interaction between individualistic and collectivist cultures has increased in frequency over the last twenty years due to global migration. Given that different standards are prescribed for the youths’ career selection from the two cultures (collectivist – relatedness, and individualistic - autonomy), making a personal career decision could be quite daunting in situations where migrant families have moved from their heritage cultures into a host country. Friction may arise between the adapting youths and their often traditionally focused and opinionated parents as the families resettle in the host countries.

According to a report by the United Nations (UN), the world counted 173–258 million international migrants from 2000–2017, representing 3.4 percent of the global population. Migration is defined by the International Organisation of Migration (IOM) as the movement of
a person or a group of persons, either across an international border, or within a state (34). In this era of mass migration, migrant students who accompanied their parents to another country and are still discerning their career pathways could be exposed to the unfamiliar cultural values in general and the school/educational system in particular (35). On this note, migrant students might face a daunting task in negotiating their career needs both within host countries’ school systems and perhaps within their own family setups. These migrant youth undoubtedly face uncertainties and complexities as career decision-making trajectory could be different in their heritage cultures compared to the prevailing status quo of the host country’s culture (25, 36). As youth plan and make career decisions, in the face of both expected and unexpected interests, goals, expectations, personal experiences as well as obligations and responsibilities, cultural undercurrents underpin what the youth can do, and how they are required to think. Some studies have examined cross-cultural variations in factors influencing the career choice of youth from both similar and dissimilar cultural settings (24, 25, 37-39). However, there may be large differences between different migrant populations.

Given the influence of cultural heritage on career choice and with the increasing numbers of transitions between cultures, it is important to examine the scope and range of research activities available in the area of youths’ career choice, particularly in relation to how movements across cultures affect the youth in their career decision making. To the best of our knowledge, there is no comprehensive review of existing literature available in this area. Using the three-dimensional framework proposed by Carpenter and Foster (11), this systematic review aims to examine the factors influencing youths’ career choices, with particular reference to cultural impact. It will also identify any gaps in the existing literature and make recommendations that will help guide future research and aid policy makers and educational counsellors in developing adequately equipped and well-integrated career choice support systems that will foster a more effective workforce.
Methods

Literature search
A systematic review strategy was devised and the literature search was conducted using the Joana Briggs Institute’s (JBI) format. The search was conducted between December 2016 and May 2018, utilising James Cook University’s subscription to access the following databases: Education Resources Information Centre (ERIC), PsycINFO, Scopus and Informit. The subject and keyword searches were conducted in three parts.

1. Career and its cognate terms:
   "Career development" OR "Career decision" OR "career choice" OR "Career choices" OR "Career planning" OR "Career guidance" OR Career OR Careers OR "Career advancement" OR "Career exploration" OR Vocation OR Vocations OR Vocational OR "Occupational aspiration" OR Job OR Jobs OR Occupations OR Occupation OR Occupational” AND

2. Youth and its cognate terms:
   “Youth OR Youths” OR "Young adults" OR adolescent* OR teenage* OR student” AND

3. Factors and variables:
   “Intrinsic OR Extrinsic OR Interpersonal OR Individualistic OR Collectivist OR Culture OR Cultures OR Cultural OR "Cross Cultural"

The Boolean operators (OR/AND) and search filters were applied to obtain more focused results. The articles included in the final search were peer-reviewed and the references of publications sourced from these searches were hand searched to obtain additional abstracts. Searches of reference and citation lists commenced in December 2016, repeated in March, July and November 2017 and finally May 2018 to identify and include any new, relevant articles.

Inclusion and exclusion criteria
Only peer-reviewed articles published in English within the last 20 years (1997-2018) and with full text available were included. Studies included in the final analysis were original research articles that focused on career choices of youth from all cultures including migrant youth who
are also known as bicultural (those who accompanied their parents to another country). The rationale for using the cultural concepts of collectivist and individualistic cultural settings was inspired by Hofstede’s Cultural Dimensional Scores Model (29). Abstracts were excluded if they focused on students below secondary school level and those already in the workforce as the study mainly focused on youth discerning their career choices and not those already in the workforce.

Data extraction

Two of the researchers (PAT and BMA) independently assessed data for extraction, using coding sheets. Study variables compared were author and year of publication, country and continent of participant enrolment, cultural setting, study design, participant numbers and educational level, factors influencing career choice and major outcomes. Data were crosschecked in a consensus meeting and discrepancies resolved through discussion and mutual agreement between the two reviewers. The third and fourth authors (T.I.E and D.L) were available to adjudicate if required.

Quality of methods assessment

In this study, two reviewers (PAT and TIE) ascertained the quality and validity of the articles using JBI Critical Appraisal (CA) tools for qualitative and cross-sectional studies (40). In any event of disagreement, a third reviewer (BMA) interceded to make a judgement. Both JBI CA tools assess the methodological quality of the included studies to derive a score ranging from 0 (low quality) to 8 or 10 (high quality). Using these tools, studies with a total score between 0 and 3 were deemed of low quality, studies with a score between 4 and 6 were classed as of moderate quality and studies with scores from 7 were deemed to be of high quality (sound methodology).
RESULTS

Study selection

Articles retrieved from the initial database search totaled 5,201. An additional 38 articles were retrieved from direct journal search by bibliographic search. A total of 597 records remained after duplicates and unrelated articles were removed. Of this number, 521 were excluded after abstract review mainly for not meeting the inclusion criteria, leaving 76 full text articles for eligibility check. A further 46 were excluded because they focused on career difficulties, counselling, retention, working adolescents or the cultural setting was not stated. Applying this screening process resulted in 30 studies for inclusion in the qualitative review synthesis (see Figure 1).

Study characteristics

All three factors (Intrinsic, Extrinsic, and Interpersonal) affecting adolescents’ career choices were identified in this review (Figure 2). Out of the 30 articles, five (17%) explored interpersonal factors exclusively (35, 39, 41-43). Majority of the studies, 16 out of 30 (53%) explored interpersonal and intrinsic factors solely (21-24, 36, 37, 44-53). No articles focused solely on extrinsic or intrinsic factors. Two studies each explored the relationship between intrinsic and extrinsic (54, 55) as well as extrinsic and interpersonal factors (56, 57). The remaining five articles (17%) explored all three factors (intrinsic, extrinsic, and interpersonal, (12, 25, 38, 58, 59). Table 1 summarizes the 30 articles included in this article. Intrinsic factors explored in the literature include self-interest, job satisfaction and learning experiences. Extrinsic factors include job security, guaranteed job opportunities, high salaries, prestigious professions and future benefits. Meanwhile, interpersonal factors include parental background, family cohesion, socio-economic status, peer influence and interaction with educators.

The collectivist cultural settings examined in the reviewed articles included Argentina, Burkina Faso, Bulgaria, China, Croatia, Hong Kong, India, Indonesia, Japan, Mexico, Portugal, South Africa, South Korea, Taiwan and Ukraine; while the individualistic ones were Canada, Finland, Germany, Spain, Switzerland and United States of America. Italy was considered as partly individualistic and collectivist. Fourteen studies included participants from both collectivist and individualistic cultural settings (21-25, 35, 37-39, 41-44, 48, 52, 54-56). Twelve studies focused on collectivist cultural settings (12, 36, 45, 46, 49-51, 53, 57-59). Three studies examined participants who moved from collectivist to individualistic settings (23, 25, 48) and...
one study considered both cultural dimensions within a single setting (52). Twenty-nine of the included studies used a range of quantitative designs. Participant numbers in these ranged from 80 to 2087. One study used qualitative design with 12 participants.

**Quality of methods of included studies**

The quality assessment of methods employed in the 30 studies included in this review are outlined in Table 1. A qualitative study assessed using the JBI qualitative CA tool was of sound methodology (Table 1a). Using the JBI cross-sectional CA tool, 9 of 29 studies (31%) were of sound methodology (score of 6.5 to 7). The other 20 studies (69%) were of moderate quality (Table 1b).

**Synthesis of Study Results**

Table 2 and Figure 3 details the study setting and the underlying factors influencing youth career choices. Analysis of the reviewed articles revealed four major themes namely: extrinsic, intrinsic and interpersonal factors and emergent bicultural influence on career choice. These four major themes had several subthemes and are reported below.

**Extrinsic Factors**

Extrinsic factors examined in the reviewed articles included financial remuneration, job security, professional prestige and job accessibility.

**Financial remuneration**

Financial remuneration was identified as the most influential extrinsic factor in career choice decision. Income was considered as an important component of life, particularly among youth who had a higher level of individualism (56, 58). Wüst and Leko Šimić reported that German students ranked “a high income” highest with a 3.7 out of 5 score and regarded it as the most important feature of their future job in comparison to Croatian students who gave it a much lower ranking of 9 out of 12 items (56). While amongst Indian management students, it was rated as the third most important factor influencing career choice (58). Financial reward was also a high motivator for career decision among Chinese migrant students in Canada (25), and in Korean students (55). In contrast, the need for higher remuneration did not influence the career decision making among engineering students in India (12), and in Japanese senior college students (57).
**Professional prestige**

Professional prestige was identified as an important deciding factor for youth career decision making in India (58), South Africa (59), Croatia (56), Japan and Korea (57), which are all collectivist settings. Prestige statuses attached to some occupations were strong incentives to career choices; was ranked as the second most important positive influence in career decision making by over half of the respondents in a South African study, indicating that these youth wanted prestigious jobs so that they could live good lives and be respected in the society (59). Japanese and Korean students were highly influenced by occupational prestige (57); however, the Korean students considered it of higher importance than their Japanese counterparts did.

**Job accessibility**

Job accessibility was also considered as a deciding factor for youth’s career decision in a collectivist Burkina Faso society where nearness to employment locations prevented students from choosing careers related to their preferred fields of endeavour (54). Another study explored the perceptions of hospitality and tourism among college students and demonstrated that Korean students are more likely to focus on current market trends such as job accessibility in comparison to their American counterparts (55), implying that they are less flexibility with their choices. However, job accessibility and vocational interest were less predictive of career explorations than personality traits in both cultural settings in a different study (38).

**Job security**

Job security was reported as influential in only one study where it was identified as highly important by German youth in comparison to their Croatian counterparts (56). They suggested that their findings is in line with the uncertainty avoidance index proposed by Hofstede, (29) which also takes on a relatively high value for Germans. They provided two major reasons for the findings – (1) ‘secure jobs’ has a tradition for young Germans and (2) change in employment contracts in Germany; with fewer employees under 25 having permanent contracts (56).
Intrinsic Factors

The literature explored intrinsic factors such as personal interests, self-efficacy, outcome expectations and professional development opportunities.

Personal interests

Personal interests in career decision-making appeared to be an important factor in the selection of a life career (12, 22, 50, 54, 55, 59). Bojuwoye and Mbanjwa ascertained that about fifty per cent of youth career decisions are based on their personal interests (59), and Gokuladas maintained that students from urban areas are most likely to consider their personal interests before societal interests when making career decisions (12). Lent et al., reported that personal interest predict youth’s career outcome expectations (50) while Li and colleagues indicated that in collectivist Chinese culture, personal interests matter significantly however individual preferences are strongly influenced by social comparison (49). Atitsogbe et al., observed that Swiss students are more influenced by personal interests (54). They reported that in Switzerland, interest differentiation was significantly associated with self-identity. This scenario was compared to the situation in the collectivist Burkina Faso culture where interest differentiation and consistency were less associated self-identity (54). Similarly, Korean students were reported to focus on the prevailing market trends such as salary, job positions and promotion opportunities in contrast to American student who were more future oriented and interested in setting individual desired goal in their reality oriented-perceptions (55). Personal interest was also shown to career aspirations in Mexican American women (22).

Self-efficacy

Self-efficacy was considered a vital intrinsic factor in the career decision-making process of youth (21, 23, 38, 52). Howard et al. reported individualistic and collectivist dimensions in two different regions within the same country due to economic factors (52). In collectivist cultures, student self-efficacy was linked to their level of congruence with their parents. Whereas in individualistic cultural settings, like America, families encourage students to become self-sufficient and independent (21, 23, 24, 38, 44).

Outcome expectations

Two studies carried out in collectivist cultural settings reported that youth’s outcome expectation are contingent/dependent on the degree of perceived congruence with parents
One article that studied the outcome expectations of youth in individualistic cultural set up reported that among students in the United States, strong career maturity, confidence and outcome expectations were culturally based (37).

**Professional Development Opportunities**

The opportunity for professional development is a major intrinsic career-influencing factor (21, 37, 53). University students in China were influenced by career development and individually motivated (53). While American students were shown to score higher for ideal occupations (21), and influenced by goal motivation and strong career maturity (37). This is similar to high school students in Indonesia, although dependent on congruence with parents (47).

**Interpersonal Factors**

The literature discussed the extent to which family members, teachers/educators, peers and social responsibilities influence youth’s career decision-making.

**Influence of family members**

Agarwala suggested the father was seen as the most significant individual influencing the career choice of Indian management students (58). This could be understood in the context of a reasonably patriarchal society. According to the study, most of the participants had a professional background. The participants’ fathers were mostly professionals, which may have motivated their career selection. In another study, mothers (52.50%) were regarded as the most significant family variable that impacted positively on students’ career choices (59). Fathers (18.75%) were the second most significant variables, followed by siblings or guardians (16.25%) (59). Good rapport among family members culminating in an effective communication within the family set up is crucial for laying sound foundation for career decision making. Higher career congruence with parents also increased career confidence and self-efficacy (36, 45-47, 51). Furthermore, parents’ profession influences career choice as children from agricultural backgrounds tend to take on their parents’ job, while those from industrialised settings have more autonomy and career decidedness (52).

Other familial influence on career decision-making according to the results of the only qualitative study in our review, include parental values, parental pressure, cultural capital and family obligations (48). The study indicated the apparent Asian American cultural preference for certain professions/careers. Students indicated that, parental opinion...
sometimes put an emphasis on a specific career. In that study, several participants emphasized that they were not forced, but “strongly encouraged” (48):

It’s not like your parents are going to put a gun to your head and say “You’re going to be a doctor” but from a young age, they say things like, “You’re going to be a great doctor, I can’t wait until you have that stethoscope around your neck.”

**Teachers and Educators**

Teachers and educators are significant figures in the process of youth’s career decision-making (12, 41, 52, 53, 57). Cheung et al. and Howard et al. reported that in both collectivist and individualistic cultures, teacher are seen as significant figures who are agents of development and could have influence on students’ career decision making (41, 52). Cheung et al. further reported that students in Hong Kong rated perceived efficacy of teachers higher than parents due to lower level of parental education (41). In addition, Cheung and Arnold demonstrated a strong student dependence on teachers followed by peers and less of parents (53).

**Peer influence**

Two studies carried out in both cultural settings showed peer influence as a third potent force (after parents and teachers) that can significantly impact on the career decisions of youth, especially girls (41, 52). Other studies reported that peers are a branch of the significant others and as social agents, they influence their kinds through social comparisons and acceptance (12, 37, 53, 57, 59).

**Social responsibilities**

The impact of social responsibility as a driving force in youth career decision-making was identified by Fouad et al. (42), who noted that the career decision-making of South Korean youth is influenced by societal expectations. This supported by other research, which suggest that societal expectations influenced youth career choices in both collectivist and individualistic cultures (25, 32, 37, 48).
Emergent bicultural influence on youth career choices

Of the 30 articles, only three explored the career decision making of bicultural youths (23, 25, 48). Strong family support influenced US-born and Asian-born students as shown by a recent study (23). Hui and Lent found that students with stronger adherence to Asian values were more likely to perceive family support to pursue science related careers (23). High sense of obligation to parents (filial piety), internal locus of control and personal interests were identified as factors that influenced bi-cultural Asian American students’ career decision making(48). Bicultural Chinese students who were acculturated to Canada were highly intrinsically motivated (internal locus of control and self-efficacy) in their career decision-making, while those who had stronger Chinese acculturations were influenced by extrinsic (financial stability) and interpersonal (family) factors (25).

Discussion

This systematic review examined the existent factors influencing the career choices of the youths from different countries around the globe, from either or both collectivist and individualistic cultural settings. Intrinsic and interpersonal factors were more investigated than extrinsic factors in the reviewed articles. In these articles, intrinsic factors included personal interests, professional advancement and personality traits. Extrinsic factors included guaranteed employment opportunities, job security, high salaries, prestigious professions and future benefits. Meanwhile, interpersonal factors are the activities of agents of socialisation in one’s life, such as parental background, family cohesion, socio-economic status, peer influence as well as interaction with other social agents such as school counsellors, teachers and other educators (21, 44, 50, 51, 53).

The three factors (intrinsic, extrinsic and interpersonal) relating to career choices are pervasive in both cultures. Their level of influence on the youth differs from culture to culture and appear to be dependent perceived parental congruence leading to self-efficacy and better career choice outcomes. The studies carried out in Canada, Finland, Germany, Spain, Switzerland and United States of America showed a high level of individualism, which typifies intrinsic motivation for career choice. Youths in individualistic cultural settings were influenced by the combinations of intrinsic (personal interest, personality trait, self-efficacy), extrinsic (job security, high salaries) and to a lesser extent, interpersonal (parental guidance) factors and are encouraged to make their own career decisions (32, 43). In contrast, studies carried out in
Argentina, Burkina Faso, Bulgaria, China, Croatia, Hong Kong, India, Indonesia, Japan, Mexico, Portugal, South Africa, South Korea, Taiwan and Ukraine showed a high level of collectivism. Youths in collectivist cultures were mainly influenced by interpersonal (honouring parental and societal expectations and parental requirements to follow a prescribed career path) and extrinsic (prestigious professions) (24, 43). The opinions of significant others matter significantly to youths from collectivist cultural settings. Whereas in individualistic cultures, youths tend to focus on professions that offer higher income and satisfy their personal interests (48, 56).

Parental influences were found to be significant in collectivist cultural settings (46, 58), implying that youths from this culture value the involvement of significant others, especially parents and other family members, during their career decision-making processes. The activities of parents and significant others are very pivotal in the lives of the youth as they navigate their career paths. Cheung et al. reported the role of significant others (teachers) in influencing youth career choices when parents are unable to suitably play such role (41). Interestingly, one article focused on two different cultural orientations within one country and reported that parents’ profession influence career choice as children from agricultural backgrounds tend to take on their parents’ job, while those from industrialised settings have more autonomy and career decidedness (52). This finding emphasizes the complex interplay of cultural context and the environment in the career aspirations of youths (42).

The review suggest that youths of collectivist orientations, tend to subordinate personal interests to group goals, emphasising the standards and importance of relatedness and family cohesion (51). However, such patterns of behaviour may be conflicted, particularly during cross-cultural transitions. Parental influence have been reported to generate difficulties within the family and discrepancies over career choice decisions are not uncommon within both cultures (46, 60-62). The conundrum is will adolescents of collectivist orientation be comfortable with their cultural ethos after resettling in a different environment with individualistic cultural beliefs and practices?

Our study revealed that when youth transfer from their heritage culture to a different cultural setting, their cultural values are challenged and their career decision-making patterns may be affected. For instance, Tao et al. reported that students of Chinese descent who were acculturated to Canada primed personal interests, self-efficacy and financial stability instead of honouring parental and societal expectations in their career decision-making (25). Similarly,
Asian American students with stronger adherence to Asian values had a high sense of obligation to parents (48) and were more likely to perceive family support than their counterparts who were more acculturated to American values (23). Our data also suggest a strong interplay of individualist and collectivist cultural values coexisting in harmony and jointly influencing the youth in the current global environment define themselves, relate to others, and decide priorities in conforming to social/societal norms. Movement across cultures (migration) leads to several changes and adjustments in an individual’s life. The internal and psychological changes the youth may encounter, otherwise known as psychological acculturation, also affect their career identity (63). Given that only three out of the 30 reviewed studies were conducted in bicultural settings (23, 25, 48), further studies are recommended to examine the career choices practices of youths who have transferred from collectivistic to individualistic cultures.

**Practical implications for counsellors and policy makers**

Social Learning Theory proposes that the role of a career counsellor is to help clients expand their career choices and help clarify beliefs that can interfere or promote their career plans (64). Culture has a major influence on people’s beliefs therefore, it is integral that career counsellors are able to provide culturally responsive career directions to guide the youth in the pursuit of their career aspirations. Providing accessible sources of support and empowering youths to openly discuss their concerns relating to career decision-making will broaden the youths’ understanding and this could have a significant impact on their academic and career pathways. Family support is important for all youths as they navigate their career explorations, especially for migrants. The role of counsellors is not only limited to the youths, it can also benefit the entire family. Essentially, counsellors can attempt to engage not just the youths in exploring academic and vocational opportunities, but also offer avenues for families to become involved and connected to the career decision-making processes.

Given the perennial migration streams across the globe, we recommend that career counsellors and policy makers would endeavour to be suitable career anchors to substitutes for the absent significant others in the lives of migrant youths. The influence of cultural heritage on career choice and with increasing numbers of intercultural transitions, the cultural identity and development of the youth, particularly for migrants, can be a complex and challenging process. When migrant youths transfer away from their heritage cultures, leaving their significant others
behind, they face a daunting task to decipher their career aspirations. Cultural identities combined with the varied expectations for achievement can be an overwhelming experience for the youth. Counsellors can seize this opportunity to provide companionship and direction as the youth figure out their career pathways (65, 66).

The counselling support to the family unit and community can have an incredibly positive influence on youths and their ability to feel connected to their cultural identity. For migrant families, this can also be a source of cultural comfort particularly for youths adjusting to the bicultural identity experience (25). For career counsellors working with migrant youth, it is imperative to develop an awareness of the multiple systemic challenges youth contend with in their various social and academic settings. The significance of a school environment that is conducive and embraces the racial and academic identity of its students can be a huge asset to boost youth morale. Gonzalez et al. reported that students who feel culturally validated by others at school and experience positive ethnic regard, have more confidence in their career aspirations (67). Career counsellors together with other educators and service providers hold influential positions as they can furnish academic, cultural and social support that family members alone cannot provide.

**Strengths and Limitations of this study**

The major strength of this review is that it has provided increased understanding of the cultural underpinnings of the factors that influence the career choices of youths. The study has also highlighted areas of knowledge gaps in the literature, such as fewer studies exploring the impact of extrinsic factors on career choice and the need for more bicultural studies. However, the conclusions drawn from this review are limited to the data that were extracted from the studies identified. We acknowledge that there are caveats with the use of the concepts “collectivist and individualistic” to describe the cultural underpinnings of different countries as there are some fluidity around their usage as suggested by Hofstede (27, 68). However, the use of these concepts was helpful in classifying the cultural background of the participants included in this review. The findings of the studies reviewed within each country may not necessarily be representative of all the cultural orientations in those countries. Furthermore, researchers from different cultures (or studying different cultures) may have chosen to study only the variables that they believe will have relevance. Nevertheless, most of the studies reviewed had large sample sizes and were conducted in various countries across the globe.
Recommendations

- Of the 30 articles reviewed, only one involved qualitative study designs. Further qualitative studies on this topic are required to provide in-depth understanding of the influences on youth’s career choices and to allow causal inferences to be made.

- There were only three articles that examined the career decision-making of the bicultural youths from the perspective of the mainstream and the heritage cultures. Better career choices for the bicultural youth will enhance their self-identity and lead to commitment to duty and eventual career satisfaction. Without harnessing the potentials of youths through career education and training, the bicultural and migrant youths’ face uncertainties in the future in the host country. The rippling effects of such uncertainties in the future could have a detrimental effect on the country’s economy. Therefore, there is the need for increased research activities in this area in host countries. *Educational system planning should be developed to encourage youth to have self-efficacy and be more involved in job-related information seeking. This will be especially efficient in progressing bicultural youths who might have migrated with their parents into a new culture.*

- The three bicultural studies were conducted in North America and involved only Asian youths. There is the need for further studies to examine the level of family involvement in youths’ career choices among migrant families in different cultural settings.

Conclusions

The three factors investigated in this study are pervasive in influencing the career decisions of youths in both individualistic and collectivist societies. In collectivist societies, parental intervention is understood as a requirement to support their children’s efforts and equip them to be responsible and economically productive. Meanwhile, the standard practise in individualistic societies is for parents to endorse their children’s opinions and encourage them to choose careers that make them happy. Overall, further research is imperative to guide the understanding of parental influence and diversity in bicultural and migrant youths’ career prospects and their ability to use the resources available in their new environments to attain meaningful future career goals. Additional research, particularly qualitative, is required to explore the level of family involvement in youths’ career choices among migrant families in different cultural settings.
Conflict of interest
The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Author Contributions
PAT and BMA extracted the data. BMA, TIE and DL critically appraised and validated the study findings. PAT developed the first draft of the manuscript. BMA, TIE, DL and KT reviewed and edited the manuscript. All authors read and approved the final manuscript for submission.
References:


19. Bossman I. Bossman, Ineke, Educational Factors that Influence the Career Choices of University of Cape Coast Students (April 5, 2014). Available at SSRN:


47. Sawitri DR, Creed PA. Perceived career congruence between adolescents and their parents as a moderator between goal orientation and career aspirations. Personality and Individual Differences. 2015;81:29-34.
Figure Legends

Figure 1 Search strategy
The figure shows the search strategy including databases assessed for this study.

Figure 2 Diagrammatic illustrations of included studies highlighting the factors that influence youth career choices.
The figures shows studies reporting the three factors (intrinsic, extrinsic, and interpersonal) influencing youths career choices and the number of studies focusing on each factor.

Figure 3 Career influencing factors.
The figures shows identified career influencing factors and their distribution in cultural settings from the included studies.
Tables

Table 1. Quality assessment of included articles

Table 1a. Quality assessment of included qualitative studies using the JBI CAT

<table>
<thead>
<tr>
<th>Authors and year</th>
<th>Theoretical principles</th>
<th>Research question</th>
<th>Data collection method</th>
<th>Data analysis</th>
<th>Results interpretation</th>
<th>Researcher orientation</th>
<th>Researcher influence</th>
<th>Participant representation</th>
<th>Ethical consideration</th>
<th>Evidence based conclusion</th>
<th>Scores</th>
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</thead>
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<td>Y</td>
<td>U</td>
<td>U</td>
<td>Y</td>
<td>U</td>
<td>Y</td>
<td>8.5</td>
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</table>
**Table 1b.** Quality assessment of included quantitative studies using the JBI cross-sectional studies CAT

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<tr>
<th>No</th>
<th>Author and year</th>
<th>Inclusion criteria</th>
<th>Study setting and subjects described</th>
<th>Valid measurements</th>
<th>Decreased risk of bias</th>
<th>Confounding identified</th>
<th>Confounding adjusted</th>
<th>Measured outcomes</th>
<th>Appropriate Statistics</th>
<th>Scores (8)</th>
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<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
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<td>Atitsogbe et al., 2018(54)</td>
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<td>Y</td>
<td>U</td>
<td>U</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
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<td>Bojuwoye &amp; Mbanjwa, (2006)(59)</td>
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<td>Y</td>
<td>Y</td>
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<td>N</td>
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<td>21</td>
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<td>23</td>
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<td>Y</td>
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<td>25</td>
<td>Tao et al.</td>
<td>2018</td>
<td>Y</td>
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<td>26</td>
<td>Wüst &amp; Leko, 2017(56)</td>
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<td>N</td>
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<td>Yamashita et al., 1999(57)</td>
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<td>28</td>
<td>Yun-Jeong and Kelly, 2013(44)</td>
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<td>N</td>
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<td>29</td>
<td>Zhang et al., 2014(35)</td>
<td>Y</td>
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<td>Y</td>
<td>Y</td>
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</tbody>
</table>

Abbreviations: Y= yes, N= no, U= unknown
Table 2: Summary of studies included in the review

<table>
<thead>
<tr>
<th>Serial No</th>
<th>Author and year</th>
<th>Study setting and cultural values identified</th>
<th>Research Method</th>
<th>Sample size</th>
<th>Participants’ Level of Education</th>
<th>Factors and Study outcomes identified</th>
</tr>
</thead>
</table>
| 1         | Agarwala, 2008(58) | Collectivist: - India                         | Quantitative    | 99          | University                       | • Intrinsic - Personal characteristics like skills, competencies and abilities.  
• Extrinsic – Desire for benefits, financial reward, social recognitions and job security.  
• Interpersonal - Fathers were the most significant individuals influencing career choice. Collectivistic ethos were the predominant cultural values, though some students demonstrated individualistic tendencies. |
<p>| 2         | Atitsogbe et al., 2018(54) | Collectivist: – Burkina Faso Individualistic: | Quantitative    | 700         | University                       | • Intrinsic – Swiss students more influenced by vocational interests. |</p>
<table>
<thead>
<tr>
<th>#</th>
<th>Author(s)</th>
<th>Country</th>
<th>Research Type</th>
<th>Sample Size</th>
<th>Context</th>
<th>Findings</th>
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</thead>
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<tr>
<td>3</td>
<td>Bojuwuye &amp; Mbanjwa, 2006(59)</td>
<td>Switzerland</td>
<td>Quantitative</td>
<td>80</td>
<td>Institute of Technology students</td>
<td>- Extrinsic - Burkina Faso students influenced by job accessibility, which could prevent them from choosing careers related to their preferred fields.</td>
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</tbody>
</table>
| 4  | Caldera et al., 2003(22)                      | Collectivist: South Africa | Quantitative  | 158         | University | - Intrinsic - Personal interest (50%)  
- Extrinsic – Prestigious jobs (52.5%)  
- Interpersonal - Family members were the most influential when making career decision (82.5% mostly mothers) and then teachers and peers. |
|    |                                               |         |               |             |         |                                                                          |
|    |                                               |         |               |             |         |                                                                          |
| 5  | Cheung et al., 2013(41)                       | Collectivist: China, Hong Kong | Quantitative  | 1175        | High school | - Intrinsic – Non-Hispanic White American women influenced by intrapersonal factors.  
- Interpersonal - Mexican American women wanted to identify with parents but they also wanted to surpass parents.  
- Interpersonal – Influence of significant others teachers, parents and peers. Hong Kong students rated perceived efficacy of teachers higher than parents due to lower level of parental education. |
<table>
<thead>
<tr>
<th></th>
<th>Authors</th>
<th>Culture</th>
<th>Design</th>
<th>Sample Size</th>
<th>Setting</th>
<th>Career Choice Influences</th>
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<td>6</td>
<td>Cheung &amp; Arnold, 2014(53)</td>
<td>Collectivist: China</td>
<td>Quantitative</td>
<td>271</td>
<td>University</td>
<td>• <strong>Intrinsic</strong> – Individually motivated achievement influenced career development.</td>
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<td></td>
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<td>• <strong>Interpersonal</strong> – Strong influence of significant others. A stronger dependence on</td>
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<td></td>
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<td>teachers, followed by peers and less of parents.</td>
</tr>
<tr>
<td>7</td>
<td>Choi &amp; Kim, 2013(55)</td>
<td>Collectivist: South Korea</td>
<td>Quantitative</td>
<td>422</td>
<td>University</td>
<td>• <strong>Intrinsic</strong> – Personal interests influenced American students’ career selection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Individualistic: United States</td>
<td></td>
<td></td>
<td></td>
<td>• <strong>Extrinsic</strong> – Job prospect influenced the Korean students’ career choices.</td>
</tr>
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<td>Fan et al., 2012(38)</td>
<td>Collectivist: Hong Kong</td>
<td>Quantitative</td>
<td>761</td>
<td>University</td>
<td>• <strong>Intrinsic</strong> – American students significantly more influenced by personality traits.</td>
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<td></td>
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<td>Individualistic: United States</td>
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<td>• <strong>Extrinsic</strong> – Vocational/job interest was also a deciding factor for career choice.</td>
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<td>Personality traits were stronger than vocational interest in predicting career</td>
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<td>explorations in both cultures.</td>
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<td>• <strong>Interpersonal</strong> – Hong Kong students were more accommodating of opinions of others</td>
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<td>in the social environment.</td>
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<td>Quantitative</td>
<td>1563</td>
<td>University</td>
<td>• <strong>Interpersonal</strong> – In both Hong Kong and United States, culture played a significant</td>
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<td>role in student choice of</td>
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<td>career.</td>
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<td>Collectivist: - India</td>
<td>Quantitative</td>
<td>568</td>
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<td>Fouad et al., 2016(42)</td>
<td>Collectivist: - India</td>
<td>Quantitative</td>
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<tr>
<td>11</td>
<td>Gokuladas, 2010(12)</td>
<td>Collectivist - India</td>
<td>Quantitative</td>
<td>1550</td>
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<td>12</td>
<td>Guan et al., 2015(21)</td>
<td>Collectivist: - China</td>
<td>Quantitative</td>
<td>1874</td>
<td>University</td>
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<tr>
<td></td>
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In review

career. Significant influences of family orientation in Hong Kong compared to the United States. Strong independence among United States students and higher perceptions of family intrusiveness.

- **Interpersonal** – Family influence was similar in the four-factor model between both cultures. However, there is a stronger family influences among the collectivist Indian culture.

- **Intrinsic** - Students considered self-interest before societal interest.
- **Extrinsic** - Students saw income as an important component of life.
- **Interpersonal** – Adolescents’ career decision-making were influenced by parents, siblings, family members peers and educators.

- **Intrinsic** – American students scored higher on aspiration for ideal occupation, internal locus of control and efforts invested in career decision making.
- **Interpersonal** – Chinese students scored significantly higher on consulting with others, desire to please others,
willingness to compromise, dependence on others, and procrastination.

| 13 | Gunkel et al., 2013(43) | Individualistic - Germany - Finland - Germany - Spain - United States | Quantitative | 1845 | University | • **Interpersonal** – In high power distance cultures, career related decisions are not solely based on one’s own preferences. Career attitudes are influenced by cultural dimensions. |
| 14 | Hui & Lent, 2018(23) | Bicultural – Collectivist in individualistic setting: - Asian Americans | Quantitative | 348 | University | • **Intrinsic** - Higher self-efficacy, outcome expectations, and interests were related to family support.  
• **Interpersonal** – Strong family support and similar results for US-born and Asian-born students. Students with stronger adherence to Asian values were more likely to perceive family support to pursue science related careers. |
| 15 | Howard et al., 2009(52) | Partly Individualistic & Collectivist - Northern Italy - Southern Italy | Quantitative | 588 | Middle school | • **Intrinsic** – Self-efficacy and goal setting orientation and motivation are influenced by social support.  
• **Interpersonal** – For students from Southern Italy which is characterised as agricultural economy, familial support directly influenced their career choice. For students from Northern Italy which is an industrialised setting, family support is related to more career decidedness. |
|---|---|---|---|---|---|---|
| 16 | Kim et al., 2016(51) | Collectivist: - South Korea | Quantitative | 420 | College students | • **Intrinsic** - Self-efficacy is influenced by family support  
• **Interpersonal** – Strong family informational support, family expectations, family financial support. |
| 17 | Lee, 2001(37) | Collectivist: - Korea  
Individualistic: - United States | Quantitative | 597 | High school | • **Intrinsic** – Stronger career maturity, goal orientation, confidence, and independence among the United States students.  
• **Interpersonal** – Strong family influence for Korean students based on societal expectations. |
| 18 | Lent et al., 2010(50) | Collectivist - Portugal | Quantitative | 600 | High school | • **Intrinsic** – Interest predicts self-efficacy and outcome expectations  
• **Interpersonal** – Social support impacts on peoples’ self-efficacy beliefs. |
<table>
<thead>
<tr>
<th></th>
<th>Author(s)</th>
<th>Culture Type</th>
<th>Methodology</th>
<th>Sample Size</th>
<th>Setting</th>
<th>Intrinsic</th>
<th>Interpersonal</th>
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<tbody>
<tr>
<td>19</td>
<td>Li et al., 2015(49)</td>
<td>Collectivist: China</td>
<td>Quantitative</td>
<td>98</td>
<td>University</td>
<td>- personal preferences but strongly influenced by social comparison.</td>
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<td></td>
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<td></td>
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<td>- career choices influenced by peers through social comparison.</td>
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<td>20</td>
<td>Mau, 2000(24)</td>
<td>Collectivist: Taiwan</td>
<td>Quantitative</td>
<td>1566</td>
<td>University</td>
<td>- personal preferences but strongly influenced by social comparison.</td>
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<td></td>
<td>- career choices influenced by peers through social comparison.</td>
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<tr>
<td>21</td>
<td>Polenova, et al., 2018(48)</td>
<td>Bicultural Collectivist in individualistic setting: Asian Americans</td>
<td>Qualitative</td>
<td>12</td>
<td>University</td>
<td>- internal locus of control and personal interest. There was an interaction between two cultures.</td>
<td>- high sense of obligation to parents (filial piety).</td>
</tr>
<tr>
<td>22</td>
<td>Sawitri et al., 2014(46)</td>
<td>Collectivist: Indonesia</td>
<td>Quantitative</td>
<td>954</td>
<td>High school</td>
<td>- self-efficacy is important but it is affected by parental influence.</td>
<td>- perceived career congruence with parents.</td>
</tr>
<tr>
<td>23</td>
<td>Sawitri et al., 2015(45)</td>
<td>Collectivist: Indonesia</td>
<td>Quantitative</td>
<td>351</td>
<td>High school</td>
<td>- adolescent–parent career congruence is indirectly associated with self-efficacy and career aspirations.</td>
<td>- strong parental influence</td>
</tr>
</tbody>
</table>
| 24 | Sawitri et al. 2015(47) | Collectivist: - Indonesia | Quantitative | 601 | High school | **Intrinsic** – Goal oriented career aspirations, performance and mastery approach are dependent on degree of perceived congruence with parents.  
**Interpersonal** – Perceived career congruence with parents reduces self-oriented goals. |
| 25 | Sawitri et al, 2017(36) | Collectivist: - Indonesia | Quantitative | 337 | High school | **Intrinsic** – Higher career congruence with parents lead to career confidence and self-efficacy.  
**Interpersonal** - Those who value inequality conform to parents and give up their own career goals. |
| 26 | Shin & Kelly, 2013(44) | Collectivist: - South Korea  
Individualistic: - United States | Quantitative | 347 | University | **Intrinsic** - In both cultures, the results show that optimism was an important factor to vocational identity. American families encourage students to become self-sufficient and independent  
**Interpersonal** – Family support plays an important role in career development for the Korean students.  
Bicultural Chinese students who were acculturated to Canada were intrinsically motivated in their career decision-making, while those who had stronger |
| 27 | Tao et al., 2018(25) | Bicultural – Collectivist in individualistic setting: - Chinese Canadians | Quantitative | 194 | University | **Intrinsic** – Self-efficacy  
**Extrinsic** – Financial stability  
**Interpersonal** – familial influence  
Bicultural Chinese students who were acculturated to Canada were intrinsically motivated in their career decision-making, while those who had stronger |
Chinese acculturations were influenced by extrinsic and interpersonal factors.

<table>
<thead>
<tr>
<th></th>
<th>Study (Year)</th>
<th>Type</th>
<th>Sample Size</th>
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<th>Interpersonal</th>
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<tr>
<td>28</td>
<td>Wüst &amp; LekoSimic, 2017(56)</td>
<td>C</td>
<td>Collectivist: Croatia</td>
<td>Quantitative</td>
<td>478</td>
<td>University</td>
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<td>I</td>
<td>Collectivist: Germany</td>
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<tr>
<td>29</td>
<td>Yamashita et al., 1999(57)</td>
<td>C</td>
<td>Collectivist: Japan, Korea</td>
<td>Quantitative</td>
<td>2087</td>
<td>University</td>
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<tr>
<td>30</td>
<td>Zhang et al., 2014(35)</td>
<td>C</td>
<td>Collectivist: United States, Mexico</td>
<td>Quantitative</td>
<td>372</td>
<td>University</td>
</tr>
</tbody>
</table>

- **Extrinsic** – High income and secure jobs are important to German students while being part of a recognised profession is important to Croatian students.
- **Interpersonal** – Social responsibility (helping others, support society) is important to Croatian students.

- **Extrinsic** – Economic viability, highly appreciated and well paid jobs
- **Interpersonal** – Parents, teachers and friends have influence on career choice of occupation

- **Interpersonal** – Mexican-born females had higher family orientations than their US-born and Non-Hispanic White counterparts. Country of birth was more strongly related to career commitment than ethnicity/cultural background.
Records identified through database search (n = 5201)
- ERIC: 1212
- SCOPUS: 2604
- PsycInfo: 1186
- Informit: 199

Additional records (n = 38)

Total records identified (n = 5239)

Unrelated (n=2994) and Duplicates (n = 1648) removed

Abstracts screened (n = 597)

Records excluded (n = 521)

Full text articles assessed for eligibility (n = 76)

Full text articles excluded with reasons (n = 46)
- Unidentified cultural setting (n=28)
- Career difficulties (n=12)
- Career counselling (n=3)
- Career retention (n=2)
- Working adolescents (n=1)

Studies included in quality analysis (n = 30)