

The Cultural Shaping of Career Aspirations: Acculturation and Chinese Biculturals' Career Identity Styles

Dan Tao
Concordia University

Rui Zhang
Dickinson College

Evelina Lou
Navigator Ltd., Toronto, Ontario, Canada

Richard N. Lalonde
York University

Choosing one's occupation is an important life decision for young adults. This decision may be particularly complicated for biculturals who have access to two potentially conflicting sets of career-related cultural norms. The present study examined the role of both mainstream and heritage acculturations in the context of career decisions, for a sample of bicultural Chinese emerging adults in Canada ($N = 194$). Results first verified the validity of a modified measure of Berzonsky's (1989) identity processing styles in the career domain. Path analysis supported our proposed model and showed that Canadian acculturation predicted an informational career identity style, whereas Chinese acculturation predicted a normative career identity style. Furthermore, self-efficacy and intrinsic life goals mediated the relation between Canadian acculturation and an informational style, whereas family allocentrism and extrinsic life goals mediated the relation between Chinese acculturation and a normative style. Two unhypothesized pathways also emerged: intrinsic life goals negatively mediated the relation between Canadian acculturation and normative style; family allocentrism mediated the relation between Chinese acculturation and informational style. Finally, an informational style was positively related to eudaimonic well-being and meaningfulness of career field, whereas normative and avoidant styles were negatively related to the well-being measures. Overall, this study provided support for an acculturation framework for examining career identity styles among biculturals.

Public Significance Statement

This study provides evidence that both mainstream and heritage acculturation can play an important role in Chinese biculturals' career identity styles, and that these are related to measures of well-being. The relationships between acculturation and career identity styles can be explained by self-efficacy, family level collectivism, as well as intrinsic and extrinsic life goals. Overall, the results underscore the usefulness of applying an acculturation framework while counselling a multicultural clientele in the career domain.

Keywords: career identity styles, acculturation, Chinese biculturals, well-being, path analysis

Choosing one's occupation is a significant life decision for young adults (Erikson, 1956). Career-related decisions, such as determining one's ideal career path, are made in cultural con-

texts, and the factors involved in these decisions can vary across cultures. In Western individualistic cultures, which promote self-expression and self-actualization, career-related decisions are seen as personal matters. In Eastern collectivistic cultures, which emphasize subordination of self-realization needs to group needs, careers are viewed as a means to an end (e.g., Leong & Chou, 1994). For young adults who are exposed to both individualistic and collectivistic cultures (i.e., biculturals), career-related decisions can involve negotiating between options rooted in two sets of potentially conflicting cultural values and norms (Phinney & Baldelomar, 2011). This decision-making process is particularly important in the Canadian context, where one out of five people is foreign-born and one out of two immigrants comes from Asia, with East Asia as the

Dan Tao, Department of Psychology, Concordia University; Rui Zhang, Department of Psychology, Dickinson College; Evelina Lou, Navigator Ltd., Toronto, Ontario, Canada; Richard N. Lalonde, Department of Psychology, York University.

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Correspondence concerning this article should be addressed to Dan Tao, Department of Psychology, Concordia University, 7141 Sherbrooke West, Montréal, Quebec, Canada H4B 1R6. E-mail: dan.t929@gmail.com

biggest ethnic group, accounting for 14.33% of the total immigrant population (Statistics Canada, 2017). As more and more young people from Eastern collectivistic countries relocate to individualistic North America for educational or immigration purposes, it is crucial to understand the psychological processes and potential challenges involved in career identity development when influence of multiple cultures is at play.

Theoretical models for examining identity development and career decision making include Marcia's (1966) identity status model and Berzonsky's (1989) identity process style model. Limited research has applied these models to the career domain for bicultural individuals whose cultures set out conflicting career norms. The purpose of the present study was to examine the relations between heritage and mainstream acculturation and career identity styles for bicultural young adults. Specifically, we investigated the links between Chinese young adults' career identity process styles and their degree of acculturation to both Canadian and Chinese societies, and tested the mediating factors that may underlie these relations. The study focused on Chinese *biculturals*, who are defined as individuals who have had considerable exposure to two cultures (see West, Zhang, Yampolsky, & Sasaki, 2017). Our sample includes not only first- and second-generation Chinese Canadians, but also Chinese international students and workers in Canada, all of whom have continuous exposures to both Chinese and Canadian cultures.

Identity Status and Identity Style Models of Identity Development

The most influential theoretical framework for examining identity status is Marcia's (1966) model. Marcia described two basic processes that jointly influence one's identity status: exploration, which refers to the degree of searching and choosing among meaningful alternatives, and commitment, which refers to the degree of personal investment in making a decision. High and low levels of exploration and commitment are crossed to form four identity statuses. High exploration and high commitment represent an *identity achievement* status, whereas low exploration and low commitment combine to form *identity diffusion*. *Identity moratorium* is when exploration is high but commitment is low; *identity foreclosure* is when exploration is low but commitment is high. Marcia's model was developed from an individualistic Western cultural lens, where autonomy and independence are deemed necessary to reach an identity achievement status in one's occupation and ideology. The goal of reaching identity achievement, however, may not be normative in Eastern cultures, where emphasis on family harmony, interdependence, and collective decision making correspond more closely to the identity foreclosure status (Phinney & Baldelomar, 2011).

Although Marcia's (1966) status model is widely known and well-regarded, Berzonsky (1989) observed that it treats identity as a relatively stable outcome and fails to consider the possibility of identity development changes over the life span. Berzonsky proposed a modified model that focuses on three identity-processing styles (i.e., social-cognitive strategies employed by individuals in dealing with identity conflicts and issues). Individuals with an *informational* identity style (corresponding to Marcia's identity achievement) actively seek and evaluate self-relevant information and are open to changes in self-views. Individuals with a *norma-*

tive identity style (corresponding to Marcia's identity foreclosure) tend to internalize goals and expectations from significant others as the standard in developing one's self-identity. Individuals with a *diffuse-avoidant* identity style (corresponding to Marcia's identity diffusion) avoid dealing with identity conflicts and act in accordance with situational demands. Given this model's process-oriented view of identity development, commitment level is measured separately and thus there is no style that maps onto Marcia's identity moratorium (i.e., high exploration, low commitment).

In this study, we adopted Berzonsky's (1989) identity style model, as our interest in the transitional period of emerging adulthood lies in understanding the process of forming one's career identity. Moreover, the tighter social norms and stronger expectation to adhere to the status quo in collectivistic cultures contrast sharply with the looser norms and the emphasis on and openness to change in individualistic cultures (Schwartz, 2016). Thus, for young adults who juggle the two types of cultures, the identity exploration process during emerging adulthood may be more complex than for those whose lived experiences are situated in a single culture. In the current study, our focus is thus on the processes and exploration styles related to career identity (as per Berzonsky's model) as biculturals negotiate different cultures during this important transitional period, rather than whether individuals have committed to a certain identity status as in Marcia's (1966) model.

Most studies applying Berzonsky's model have been limited to Western samples (see meta-analysis by Bosch & Card, 2012), and few have examined identity styles in the career domain. The one exception, a study by Eryigit and Kerpelman (2011), found that the relations between identity styles and career exploration and commitment (as defined using Berzonsky's [1989] model) were consistent across American and Turkish samples. Given our focus on the career domain, we adapted and contextualized Berzonsky's identity process styles and termed them *career identity styles*.

Acculturation and Career Identity Styles

Psychological acculturation is the process of internal change when individuals experience continuous firsthand contact with a different culture (Berry, 1997). When individuals move from one culture to another, their initial identity, formed in the context of the heritage culture, may undergo change as a result of continuous exposure to the host culture. Likewise, changes in career identity can also occur as individuals reevaluate their heritage culture's beliefs about choosing a career during their acculturation to the host culture.

With respect to occupational roles and decision-making styles, individualistic and collectivistic cultures promote different beliefs. Individualistic cultures promote independence, self-expression, and individual achievement (Triandis, 1995); an occupation is generally viewed as a way to express your passion and interests, such that exploration and decision changes are encouraged. In contrast, collectivistic cultures tend to value obedience and conformity to others' expectations; an occupation is perceived as a means of obtaining financial security and social status in order to fulfill family needs. Individualistic culture fosters independent and rational approaches to decision making. This may lead to less career decision-making difficulty for European American students compared with Asian American students, who conform more to familial and societal expectations (Mau, 2004). Research has

shown that when facing decision-making dilemmas, Euro-Australian students tend to choose solutions that reflected individualist goals, personal values and rewards more so than Chinese Australian students (Brew, Hesketh, & Taylor, 2001). In the Chinese Confucian tradition, the emphasis on filial piety and effort translates into obedience to authority figures like parents and teachers (Ho, 1996), as well as a focus on academic excellence (Stevenson & Lee, 1996). Chinese young adults may internalize the high academic standards set by their parents and feel obligated to align their academic and future career goals with the expectations of their family. The parental pressure that Chinese students experience has been found to predict the desire to live up to parental expectations, which, in turn, leads to self-efficacy and interest in stereotypical and prestigious occupations (Shen, Liao, Abraham, & Weng, 2014). These career paths are often in STEM (i.e., science, technology, engineering, mathematics) fields, business, or law (Tang, Fouad, & Smith, 1999; Tyson, Lee, Borman, & Hanson, 2007). For example, a large-scale longitudinal study of 1996 to 1997 Florida high school graduates demonstrated that about one third of the Asian graduates from this cohort obtained STEM degrees, more than double the rates of their White, Black, and Hispanic counterparts (Tyson et al., 2007). In Canada, with immigrants accounting for 20% of the population, they represent 50% of all STEM degree holders at the bachelor's level and above (Government of Canada, 2017).

Given the seemingly important role of culture in shaping career identity styles, research on career development conducted through the lens of acculturation is surprisingly scarce. Among the few available studies focusing on Asians, it has been found that compared with European Americans, Asian Americans exhibited a more dependent decision-making style and lower decision-making self-efficacy (Leong, 1991; Mau, 2000). Hardin, Leong, and Osipow (2001) further observed less career maturity (i.e., mastery of developmental tasks appropriate to a career stage) among Asian American students compared with European American students, but this difference was not observed for the more American-accultured Asians. Similarly, it has been reported that among Asian Americans, higher mainstream acculturation was related to increased emphasis on self-realization (Leong & Tata, 1990) and reduced interest in stereotypically Asian career choices (Park & Harrison, 1995; Tang et al., 1999). The objective of the current study was to build upon this existing literature by examining how acculturation to both mainstream and heritage cultures influences the process of career decision making for Asians in the Canadian context.

Career Identity Styles Model

We propose a process model that links acculturation with career identity styles. Our model draws from Berzonsky's (1989) identity styles model and the bidimensional model of acculturation that conceptualizes mainstream and heritage acculturation as independent dimensions (Ryder, Alden, & Paulhus, 2000). We posit that the more Chinese young adults embrace Canadian culture, the more likely they will be to adopt an informational identity style. Conversely, the more they retain their Chinese culture, the more likely they will be to adhere to a normative identity style. We aimed to enrich the acculturation literature by taking a closer look at career identity styles, a topic not often studied in this field.

Furthermore, our model illustrates possible pathways through which acculturation may come to influence career identity styles. We present rationales for each of three factors that may mediate the relations between acculturation and career identity styles: self-efficacy, family allocentrism, and life goals.

Self-efficacy as a mediator of the acculturation-career identity relationship. According to Bandura (1997), perceived self-efficacy—a person's belief in their ability to produce desired outcomes by their actions—plays a central role in one's career choice and development. It has been proposed to be a key predictor of career interests, selection, and performance (Lent, Brown, & Hackett, 1994). General self-efficacy has been found to positively influence specific self-efficacy across tasks and situations (Chen, Gully, & Eden, 2001). We posit that an extensive exploration and discovery of one's career identity should require a sense of self-competence in one's ability to meet the demands and challenges of a potential occupation. We also note that a heightened capacity to deal with novel situations (i.e., higher self-efficacy) has been associated with stronger American acculturation among Asian Americans (Kim & Omizo, 2006). Thus, we expected that a higher level of Canadian acculturation should be associated with a higher level of self-efficacy, which in turn, should be related to a stronger informational style in career decision making.

Family allocentrism as a mediator of the acculturation-career identity relationship. Family allocentrism refers to the tendency to fulfill duties and act according to family expectations; it is the expression of collectivism at the family level (Lay et al., 1998). In terms of the link between family connectedness and identity styles, Lay and colleagues (1998) found a positive relation between family allocentrism and a general normative identity style assessed with a 1992 version of Berzonsky's (1989) identity style inventory. It was expected, therefore, that family allocentrism would be associated with a stronger normative career identity style. Moreover, given that traditional Chinese culture puts family at the core of one's identity, family should be an influencing factor in one's major life decisions. Thus, we predicted that stronger acculturation to Chinese culture would be associated with higher family allocentrism, which in turn, would be related to a stronger tendency to adopt a normative career identity style. In other words, family allocentrism should mediate the relation between Chinese acculturation and a normative career identity style.

Life goals as mediators of the acculturation-career identity relationship. Kasser and Ryan (1993) emphasized the need for a distinction between intrinsic and extrinsic life goals (also see Ryan & Deci, 2000). Intrinsic goals (e.g., self-development) are driven by intrinsic motivation: doing something for the satisfaction of the activity itself. In contrast, extrinsic goals (e.g., financial success) are driven by extrinsic motivation: performing an activity to attain a separable outcome that is based on external standards. Previous research by Berzonsky and his colleagues (see Duriez, Luyckx, Soenens, & Berzonsky, 2012) found that a normative identity style was positively associated with extrinsic goals; this was a predicted relationship given the reliance of those with a normative identity style on the expectation of significant others. Conversely, they also predicted and found that an informational identity style (i.e., an open and self-reflective stance) was positively associated with intrinsic goals (also see Berzonsky, Cieciuch, Duriez, & Soenens, 2011). In line with these findings, we predicted that extrinsic goals would be associated with a normative career identity style among

Chinese young adults in Canada. In contrast, we predicted that intrinsic goals would be associated with an informational career identity style.

Extrapolating from the finding that Asian Americans put greater emphasis on extrinsic goals such as financial gains and future security than on intrinsic goals such as interpersonal relations and self-expression (Leong, 1991), we also expected acculturation to relate to intrinsic and extrinsic goals in opposing directions. Whereas Canadian acculturation was predicted to be associated with intrinsic goals, Chinese acculturation was expected to be associated with extrinsic goals. Taken together, we made two parallel predictions: intrinsic goals would mediate the influence of Canadian acculturation on informational career identity style, and extrinsic goals would mediate the influence of Chinese acculturation on normative career identity style.

Career Identity Styles and Psychological Outcomes

It has been suggested that some identity styles may result in more positive psychological outcomes than others, particularly in a Western cultural context. Berzonsky's (1989) informational style has been found to be a stronger predictor of psychological well-being compared with the normative style, whereas the avoidant style was found to have a negative relation with well-being (Vleioras & Bosma, 2005). In this study, we focused on eudaimonic well-being, which refers to quality of life that comes from developing and reaching one's full potential (Waterman et al., 2010). Compared with other subjective well-being measures that focus on hedonic experiences of pleasure, eudaimonic well-being taps into the notion of happiness that arises from fulfilling personally expressive goals, achieving self-realization, and functioning fully as a person. It has been suggested that the eudaimonic perspective on well-being is particularly suitable to studying optimal functioning, which is more relevant to our topic of study, compared with the subjective well-being perspective, which has

been more beneficial in understanding psychological malfunctioning (see Waterman et al., 2010).

To further explore the idea of eudaimonic well-being within the career domain, we extended the notion of meaningful work (Steger, Dik, & Duffy, 2012), which is a concern for young adults who are about to enter the workforce. People who feel that their work is meaningful report greater well-being (i.e., meaning in life and life satisfaction) and less psychological distress (i.e., anxiety, hostility, and depression; Arnold, Turner, Barling, Kelloway, & McKee, 2007; Steger et al., 2012). Although the conceptualization of the meaning of work and its measurement were originally intended for people with employment (Steger et al., 2012), our assessment focused on the broader meaningfulness of career fields that young adults contemplate prior to employment. Thus, we explored the possibility that an informational style would be positively related to the anticipation of having a meaningful career field; it is also possible that normative and avoidant career identity styles would be unrelated or even negatively related to perception of a meaningful career field.

Proposed Model and Additional Predictions

In the current study, we propose a theoretical model of career decision making that is anchored in the literature that we have presented. This model, as shown in Figure 1, starts with the prediction that Canadian acculturation would be associated with an informational career identity style, whereas Chinese acculturation would be associated with a normative career identity style. More importantly, it further predicts that self-efficacy and intrinsic life goals would mediate the relation between Canadian acculturation and an informational career identity style, whereas extrinsic life goals and family allocentrism would mediate the relation between Chinese acculturation and a normative career identity style.

Apart from the preceding model, we explored another potential relationship - that between career identity styles and well-being.

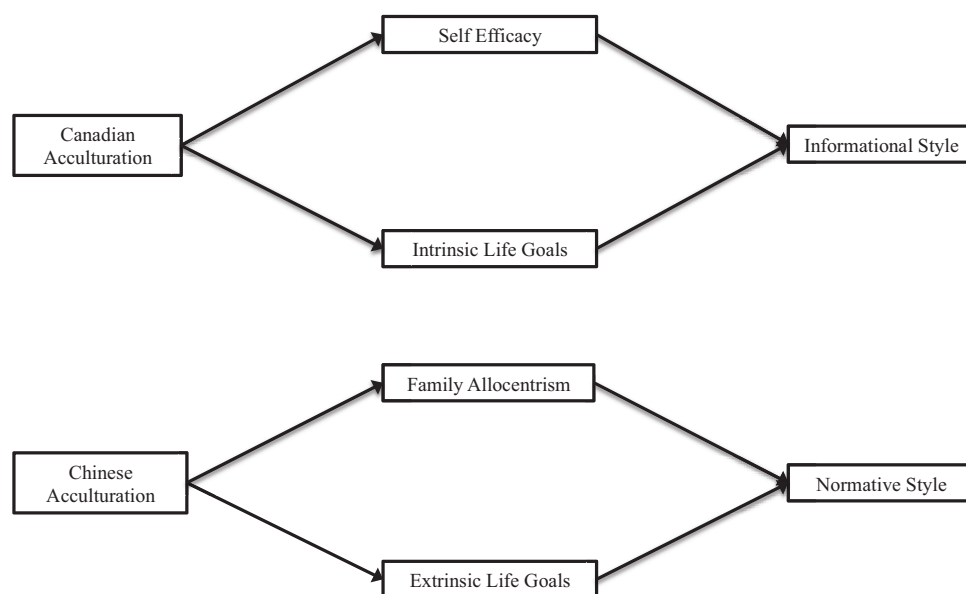


Figure 1. Proposed model.

We expected that an informational career identity style would be associated with higher levels of eudaimonic well-being and the perceived meaningfulness of career field, whereas normative and avoidant career identity styles could be associated with lower levels of eudaimonic well-being and meaningfulness of career field. Given that both eudaimonic well-being and meaningfulness of career field have not been previously anchored within cultural theory and research, these constructs were included for exploratory purposes, but they did not warrant inclusion in our theoretical model (see Figure 1).

Method

Participants and Procedure

A total of 194 Chinese young adults residing in Canada (117 female, $M_{age} = 22.2$, $SD_{age} = 4.2$, age range 18 to 38 years) were recruited through a university research participation pool ($n = 69$) and convenience and snowball sampling throughout the country ($n = 125$).¹ The very first sentence of the online survey stipulated our sample inclusion criteria: "To participate in this study, you must have been born in China or have at least one parent who was born in China." The final sample consisted of 116 participants who were born in a Chinese society (China, Hong Kong, Macau, or Taiwan) and 78 who were born in Canada, but who had at least one parent born in a Chinese society. Among those who were born outside of Canada, the average age of arrival in Canada was 16.4 years old ($SD = 6.0$), the average length of time in Canada was 6.3 years ($SD = 5.3$), and self-evaluated English fluency averaged a score of 4.0 out of 5.0. Various groups were represented in terms of their status in Canada: citizens ($n = 100$), permanent residents ($n = 11$), international students ($n = 58$), and temporary workers ($n = 8$). Most of the participants were doing their undergraduate (69.3%) or graduate (11.2%) studies, and 16.8% were employed full-time at the time of the study. For those in university, 46.1% were in STEM (science, technology, engineering and math) and business fields. Among those who are working, 58.5% were in STEM or business fields.

Participants completed an online questionnaire consisting of the measures presented in the following text. For each scaled measure, any reverse items were reverse-scored before all the items were averaged to form composite scores. Participants were offered either course credit or a chance to win a draw for their participation.

Measures

All measures used in this study were first subjected to exploratory factor analyses (EFA) to assess their dimensionality. Due to the ordinal nature of Likert-type scales, we conducted EFA on each measure based on polychoric correlations, which estimate correlations between ordinal variables. Research shows that despite the common practice of using Pearson correlations to conduct EFA on ordinal data, it tends to underestimate the magnitude of relations and yield suboptimal factor structures (Baglin, 2014; Olsson, 1979). We used the FACTOR program (Lorenzo-Seva & Ferrando, 2006) to extract polychoric correlations for all EFA models.²

In keeping with the recommended practices for conducting EFA (Baglin, 2014; Costello & Osborne, 2011; Preacher & MacCallum, 2003), we adhered to the following decision rules. First, we used the minimum rank factor analysis (MRFA) as the extraction method, which estimates the percentage of common variance explained (Baglin, 2014). Second, we used the parallel analysis to decide on the number of factors to retain. This procedure involves comparing the eigenvalues with those from randomly generated data; the factors with eigenvalues that are greater than those from the random parallel data are retained. It has been shown to outperform conventional methods such as the Kaiser criteria and the scree plot (Baglin, 2014). Finally, we chose the oblique Promin rotation method, assuming relations among retained factors. When examining factor loadings, we used 0.35 as the threshold for minimally meaningful loadings.

Acculturation. The 20-item Vancouver index of acculturation (Ryder et al., 2000) was used to measure one's degree of acculturation to both Chinese and Canadian cultures. The response scale ranged from 1 (*strongly disagree*) to 9 (*strongly agree*). Sample items include "I often participate in Chinese traditions" for the Chinese subscale, and "I believe in mainstream Canadian values" for the Canadian subscale. A higher mean score on each subscale indicates a greater degree of acculturation to that particular culture. A two-factor structure was found that mapped onto Canadian and Chinese acculturation. Both Chinese ($\alpha = .84$, 95% CI [.81, .88]) and Canadian ($\alpha = .85$, 95% CI [.82, .88]) acculturation demonstrated good reliability. This scale has been successfully used with Chinese biculturals in a number of studies (e.g., Ryder, Alden, Paulhus, & Dere, 2013).

Family allocentrism. The 21-item family allocentrism scale (Lay et al., 1998) assessed the degree to which one feels connected to one's family (i.e., collectivism at the family level). Participants rated the extent to which each statement (e.g., "I respect my parents' wishes even if they are not my own") was characteristic of themselves on a scale of 1 (*very uncharacteristic*) to 7 (*very characteristic*). A higher mean score reflected greater connectedness to one's family. A two-factor structure emerged, with the negatively keyed items loading on a separate factor. The relative

¹ A total of 288 responses were collected. Respondents were not included in the sample if they did not meet the country of origin criteria ($n = 1$), used the same response for all items in each scale ($n = 1$), were duplicated responses ($n = 4$), or did not complete most of the survey ($n = 67$). In addition, the five-item Conscientious Responders Scale was interspersed with other scales to identify participants who either failed to pay attention or responded randomly (Marjanovic, Holden, Struthers, Cribbie, & Greenglass, 2014). For each item, participants were instructed on which response option to select. On the basis of the exclusion criterion of having answered fewer than four out of the five questions correctly, 21 participants were excluded from the final sample. We ran outlier analysis using a $+/-3$ cutoff with z scores, and replaced outliers with the largest value within the range. All scales and subscales appear normal using skewness and kurtosis with a cut-off of $+/-3$ after dividing by standard deviation. Missing Completely At Random (MCAR) analysis was conducted, and the lack of significant result for most scales suggests that any missing data were missing at random. It seems that Vancouver index of acculturation (VIA) subscales were not missing completely at random, but due to the small number of missing values (12 scores for 20 items for 194 participants), expectation maximization method was used to impute the missing data for this scale, as well as for all other scales.

² We also conducted conventional EFA analysis using Pearson correlations and similar results were obtained.

independence of positively and negatively keyed items may reflect method variance, but may also be related to the East Asian tendency toward dialectical thinking and tolerance of contradiction (e.g., Spencer-Rogers, Williams, & Kaiping Peng, 2010). Despite this two-factor solution, we decided to combine positively and negatively worded items and created single composite scores ($\alpha = .82$, 95% CI [.77, .85]) to ensure comparability with prior research.³

Self-efficacy. The eight-item general self-efficacy scale developed by Chen et al. (2001) was used to measure confidence in one's ability to perform successfully. Responses were given on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*), where a higher score indicated a higher level of self-efficacy; for example, "I will be able to successfully overcome many challenges"). Factor analysis supported a one-factor structure ($\alpha = .92$, 95% CI [.91, .94]), with all items exceeding the minimum factor loading.

Life goals. The aspiration index (Kasser & Ryan, 1993) was adapted to assess levels of motivation for intrinsic (i.e., self-acceptance, community feeling, and affiliation) and extrinsic (i.e., financial success, social recognition) goals. Responses were given on a scale of 1 (*not at all important*) to 5 (*very important*). A two-factor structure was found which mapped onto intrinsic and extrinsic life goals. However, one item was dropped as it loaded onto the wrong factor. A higher mean score on the eight intrinsic items (e.g., "You will know and accept who you really are") reflected a higher level of intrinsic motivation ($\alpha = .82$, 95% CI [.78, .86]), and a higher mean score on the nine extrinsic items (e.g., "You will be financially successful") reflected a higher level of extrinsic motivation ($\alpha = .85$, 95% CI [.81, .88]).

Career identity styles. Eighteen items taken from Berzonsky's identity style inventory (ISI-5; Berzonsky et al., 2013) were adapted to assess participants' alignment with informational, normative, and avoidant identity styles in the career domain. Terms, such as career and career path, were inserted wherever necessary to make specific references to the career domain. For example, the item "I strive to achieve the goals that my family and friends hold for me" was reworded as "I strive to achieve the career goals that my family and friends hold for me." The remaining items from the original inventory were excluded because they referred to personal beliefs, values, and ideals that are not directly relevant to the career domain. Responses were given on a scale of 1 (*not at all like me*) to 7 (*very much like me*). Factor loadings for all items are reported in Table 1. One informational style item and one avoidant style item were dropped due to cross-loadings. The final subscales were comprised of five items for informational identity style ($\alpha = .76$, 95% CI [.70, .81]), six items for normative identity style ($\alpha = .75$, 95% CI [.69, .80]), and five items for avoidant identity style ($\alpha = .80$, 95% CI [.75, .84]). A higher mean score on an identity style is representative of stronger preference for that identity style.

Meaningfulness of career field. The 10-item work and meaning inventory (Steger et al., 2012) was adapted to assess the level of personal significance and meaningfulness of the career field participants were in. The Steger et al. measure was originally geared toward the workplace, but we modified and applied it prospectively for individuals who were engaged in or had recently completed an educational program tied to a particular career field. We changed references to "career" and "work" in the original measure to "career field" and "career path" so that all the items became relevant for individuals who are in the early stages of their

career path or in the process of seeking employment. Sample items are "I have found a meaningful career field" and "My career path helps me better understand myself", which were rated on a scale that ranged from 1 (*absolutely untrue*) to 5 (*absolutely true*). The original work-focused measure had three factors: greater-good motivation, positive meaning and contribution to meaning-making. However, a single factor structure emerged with our career-field focussed measure. A higher mean score indicated a stronger sense of meaningfulness of career field ($\alpha = .86$, 95% CI [.83, .89]).

Eudaimonic well-being. Twenty-one items were used to assess eudaimonic well-being (Waterman et al., 2010). These were rated on a scale of 1 (*strongly disagree*) to 5 (*strongly agree*), where a higher mean score means higher eudaimonic well-being (e.g., "It is important to me that I feel fulfilled by the activities that I engage in"). Waterman and colleagues found one single factor for the measure, although it consists of six subcategories (self-discovery, perceived development of one's best potentials, a sense of purpose and meaning in life, investment of significant effort in pursuit of excellence, intense involvement in activities, and enjoyment of activities as personally expressive). A three-factor structure was found in our sample, with three items deleted due to low or cross loadings. The three factors corresponded somewhat, but not completely, with some of the original subcategories, thus making them difficult to interpret. Similarly to the family allocentrism measure, we computed a single composite score ($\alpha = .81$, 95% CI [.77, .85]) for eudaimonic well-being to ensure comparability with prior research.

Validation measures. Three additional measures assessing career commitment, level of exploration, and reasons for choosing the current career were used to evaluate the validity of the career identity styles measure. First, six items on commitment were taken from Berzonsky's (2013) ISI-5 and tailored for the career domain (e.g., "I have clear and definite career goals"; $\alpha = .83$, 95% CI [.79, .87]), where commitment was expected to relate positively to the informational and normative styles and negatively to the avoidant style. Second, eight items were developed to measure the level of behavioural exploration ($\alpha = .79$, 95% CI [.75, .83]) in the career decision-making process, such as gaining experience and receiving career counselling (1 = *not at all*, 5 = *very much*). Career exploration (e.g., "Got lots of advice from teachers and mentors") was predicted to be positively related to informational style and negatively related to normative style. Finally, nine items were developed to gauge the importance of various factors in the consideration of one's chosen career (1 = *not at all important*, 7 = *very important*). A two-factor structure was found, with two items were grouped under *internal factors* ($\alpha = .84$, 95% CI [.78, .88]; i.e., "own interests/passion" and "finding it meaningful"), and seven items were grouped under *external factors* ($\alpha = .83$, 95% CI [.79, .87]; i.e., "family's suggestion," "influence from friends," "financial security," "social status," "easy to find jobs," "fulfill immigration requirements," and "meeting urgent financial needs").

³ Given family allocentrism's two-factor structure, we also tested a model using only the factor with positively worded items because it was correlated with other variables in ways similar to the hypothesized model, whereas the second factor with negatively worded items was mostly uncorrelated with them. The model fit was unacceptable ($\chi^2 = 30.051$, $df = 13$, $p = .005$, CFI = .943, NNFI = .877, SRMR = .074, and RMSEA = .082, 90% CI [.044, .121]).

Table 1
Factor Loadings With Oblique Promin Rotation of the Career Identity Styles Scale

Item	Factor		
	1	2	3
Avoidant style items			
I try not to think about making decisions about my career path as long as I can.		.71	
When it comes to making decisions about my career path, I like to wait as long as possible in order to see what will happen.		.71	
I am not really thinking about my career path right now, I will figure it out later.		.59	
I'm not sure where I'm heading in my career; I guess it will work out by itself. ^a	-.47	.98	
My career goals tend to change whenever I talk to different people.		.56	
It doesn't pay to worry about my career goals in advance; I decide things as they happen.		.60	
Normative style items			
When I make a decision about my career path, I automatically follow what close friends or relatives expect from me.		.77	
I strive to achieve the career goals that my family and friends hold for me.		.70	
I never question what I want to do with my career because I tend to follow what important people expect me to do.		.65	
I adopt and follow the career path I was brought up with.		.84	
I think it is better to adopt a firm set of career goals than to be open-minded.		.45	
When others say something that challenges my career goals, I automatically disregard what they have to say.		.37	
Informational style items			
I periodically think about and examine the fit between my interests, talents and career goals. ^a	-.44		.37
It is important for me to obtain and evaluate information from a variety of sources before I make decisions about my career path.			.74
When facing a career decision, I would like to take into account different points of view before making a choice.			.77
When making career decisions, I like to have as much information as possible.			.78
I spend a lot of time reading or talking to others trying to develop a career path that makes sense to me.			.69
When making decisions about my career path, I like to spend time thinking about my options.			.56

Note. Factor loadings >.35 with exclusive associations with the intended factor are in boldface type.

^aThese items were dropped due to cross-loadings.

Internal factors were expected to positively correlate with an informational style, and external factors with a normative style.

Background information. Participants provided demographic information, including gender, age, ethnicity, reason(s) for coming to Canada, immigration status, area of study in university, current career field, and perceived English fluency.

Results

Correlational analyses were first conducted to ascertain the validity of the career identity styles measure.⁴ We then followed two steps to test the hypothesized model. For the first step, bivariate correlations were computed between acculturation and career identity styles. For the second step, a path analysis was conducted to test whether Canadian and Chinese acculturation affected informational and normative career identity styles through self-efficacy, family allocentrism, and intrinsic and extrinsic life goals.

Validation of the Career Identity Styles Measure

To first evaluate convergent and discriminant validity for the three identity styles in the career domain, we correlated them with level of behavioral exploration, career commitment, and internal (vs. external) reasons for choosing a career. Consistent with *Berzonsky et al.'s (2013)* conceptualisation of identity processing styles, career exploration was positively correlated to the informational style ($r = .37, p < .001$). Moreover, level of commitment was positively related to an informational style ($r = .16, p = .031$) and negatively related to an avoidant style ($r = -.57, p < .001$). As further expected, internal reasons for choosing a career were positively associated with an informational style ($r = .26, p < .001$) and negatively associated with an avoidant ($r = -.17, p =$

.016) style. External reasons for choosing a career were positively linked to both normative ($r = .41, p < .001$) and avoidant ($r = .28, p < .001$) career identity styles. Overall, the career identity styles were correlated with measures in theoretically expected ways, providing support for the construct validity of the career identity styles measure.

The Acculturated Career Identity Style Model

As shown in *Table 2*, the expected positive correlations between Canadian acculturation and informational style ($r = .33, p < .001$) and between Chinese acculturation and normative identity style, ($r = .26, p < .001$) were found. An unpredicted positive correlation between Chinese acculturation and informational style ($r = .21, p = .004$) was also observed. Moreover, we observed a small positive correlation between Chinese and Canadian acculturation ($r = .19, p = .011$). We proceeded to test the predicted path model presented in *Figure 1* using AMOS 17 with maximum likelihood estimation. Model fit was evaluated with the chi-square test and four of the most widely reported fit indices: the confirmatory fit index (CFI), the nonnormed fit index (NNFI), the standardized root-mean-squared residual (SRMR), and the root-mean-square error of approximation (RMSEA). According to *Hu and Bentler (1999)*, for acceptable model fit, CFI and NNFI should be greater than .95, SRMR less than .08, and RMSEA less than .06. In evaluating model fit, we adopted *Kline's (2011)* recommendation

⁴Correlational analyses were also conducted to test the effects of age and gender. Age was significantly negatively correlated with Canadian acculturation ($r = -.17, p = .022$), and women tended to have more intrinsic goals ($r = .15, p = .050$). No other significant correlations were found.

Table 2
Means, Standard Deviations, and Intercorrelations of Career Identity Styles, Acculturation, Mediators, and Well-Being Measures

Measure	M (SD)	1	2	3	4	5	6	7	8	9	10
1. Informational style	5.2 (.9)	—									
2. Normative style	3.5 (1.1)	-.07	—								
3. Avoidant style	3.5 (1.2)	-.10	.52**	—							
4. Canadian acculturation	6.4 (1.1)	.33**	-.00	-.02	—						
5. Chinese acculturation	6.6 (1.1)	.21**	.26**	.15*	.19**	—					
6. Family allocentrism	4.5 (.7)	.22*	.37**	.14	.07	.51**	—				
7. Self-efficacy	5.3 (1.0)	.40**	-.06	-.23**	.34**	.13	.12	—			
8. Intrinsic goals	4.2 (.5)	.34**	-.15*	-.24**	.37**	.14*	.15*	.43**	—		
9. Extrinsic goals	3.6 (.7)	.14	.30**	.09	.05	.17*	.21**	.37**	.27**	—	
10. Eudaimonic well-being	3.5 (.5)	.36**	-.24**	-.44**	.34**	.11	.07	.46**	.52**	.04	—
11. Meaningful career field	3.6 (.7)	.25**	-.11	-.24**	.18*	.01	.06	.21**	.55**	.09	.47**

Note. $N = 194$, $df = 194$.
* $p < .05$. ** $p < .01$.

that cautioned against an uncritical reliance on simple thresholds for fit indices. Specifically, we considered the chi-square statistic relevant as a significant chi-square could indicate problematic model-data discrepancies in relatively small samples. Because fit indices are indicators of the global fit of a model, we also inspected correlation residuals and modification indices for model misspecification that may be overlooked by fit indices.

The initial results indicated a poor fit of the data ($\chi^2 = 105.87$, $df = 19$, $p < .001$, CFI = .69, NNFI = 0.66, SRMR = .098, RMSEA = .15, 90% CI [.126, .183]). A model respecification was subsequently conducted, taking into consideration the theoretical and conceptual soundness of the suggested modifications (Byrne, 2010; Garson, 2012). First, the modification indices suggested that Canadian acculturation continued to exert a direct effect on informational style beyond the specified mediated effects. To accommodate the possibility that self-efficacy and intrinsic goals did not fully mediate the effect, we included a direct path from Canadian acculturation to informational style. Second, a path from family

allocentrism scale to informational style was added. Given the unexpected positive bivariate correlation between Chinese acculturation and informational style, this suggested pathway accounted for such an association via family allocentrism. Thus, the positive influence of Chinese acculturation on informational style may not be direct, which we tested subsequently. Third, we connected intrinsic goals with normative style. Although we only predicted a positive association between extrinsic goals and normative style, the suggested negative association between intrinsic goals and normative style makes theoretical sense. Finally, we covaried the error terms of self-efficacy, intrinsic and extrinsic goals as they were more strongly associated with each other than our model could account for. This revised path model (see Figure 2) showed an excellent fit ($\chi^2 = 17.137$, $df = 13$, $p = .193$, CFI = .985, NNFI = .969, SRMR = .047, and RMSEA = .041, 90% CI [.001, .087]).

Because our hypothesized model was comprised of four mediating effects and the revised model introduced two additional ones,

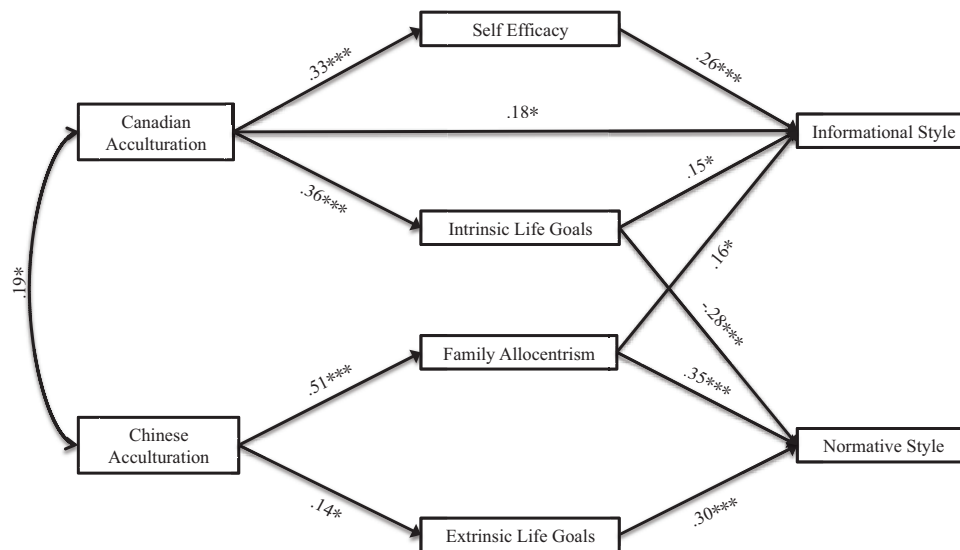


Figure 2. Path analysis of acculturations on career identity styles. Standardized coefficients are presented ($N = 194$). * $p < .05$. *** $p < .001$.

our final step entailed testing those multiple mediations. A bootstrapping procedure was used, with 2,000 bootstrap samples to estimate indirect effects. A significant indirect effect would be indicated by a 95% bootstrapped confidence interval (CI) that does not include zero. The bootstrapping results indicated that self-efficacy was a significant mediator between Canadian acculturation and informational style, 95% CI [.02, .14]. Intrinsic goals was not a significant mediator between Canadian acculturation and informational style at the 95% level, CI [-.004, .12], but significant at the 90% level, CI [.002, .10]. On the other hand, between Chinese acculturation and normative style, both family allocentrism 95% CI [.11, .25] and extrinsic goals 95% CI [.01, .09] significantly mediated the relation. In addition, intrinsic goals significantly mediated the relation between Canadian acculturation and normative style such that Canadian acculturation increased the endorsement of intrinsic goals, which in turn reduced the reliance on the normative style, 95% CI [-.17, -.05]. Moreover, family allocentrism was also a significant mediator between Chinese acculturation and informational style, 95% CI [.01, .13].⁵

Career Identity Styles and Well-Being

Our expectations regarding the association between career identity styles and eudaimonic well-being and meaningfulness of career field were supported. As shown in Table 2, an informational style was significantly related to eudaimonic well-being ($r = .36$, $p < .001$) and meaningfulness of career field ($r = .25$, $p < .001$). In contrast, a normative style was negatively associated with eudaimonic well-being ($r = -.24$, $p = .001$). Finally, it was also observed that an avoidant style was negatively associated with eudaimonic well-being ($r = -.44$, $p < .001$) and meaningfulness of career field ($r = -.24$, $p < .001$).

Discussion

The present study investigated the relations between Chinese biculturals' mainstream and heritage acculturation and career identity styles (informational, normative, and avoidant). We further tested whether these relations could be explained by self-efficacy, family allocentrism, and intrinsic and extrinsic life goals. Finally, we explored the relations between career identity styles and well-being outcomes (eudaimonic well-being, meaningfulness of career field). The results pertaining to each set of these relations will be discussed in turn.

Acculturation and Career Identity Styles

As hypothesized, the more Chinese biculturals reported being acculturated to Canadian culture, the more they would adopt an informational style in career decision making. The more they were acculturated to Chinese culture, the greater their tendency to endorse a normative style in career decision making. These findings are consistent with the values emphasized in the two respective cultures, attesting to the fruitfulness of taking a cultural perspective when studying bicultural individuals' vocational choices. Adopting individualistic cultural values like autonomy, freedom, and self-actualization seems to facilitate the individual exploration of career options for Chinese biculturals, whereas adopting collectivist values like filial piety and financial stability appears to lead to more interdependent career decisions.

Interestingly, our study also revealed an unhypothesized positive relation between Chinese acculturation and informational style. Previous work suggests that in order to develop an achieved ethnic identity, ethnic minorities go through considerable length to explore the meaning and traditions associated with their ethnicity (Phinney & Baldelomar, 2011). Thus, in addition to internalizing Western cultural values emphasised by Canadian culture, discovering what it means to be Chinese may be an integral part of Chinese biculturals' deliberate and open-minded approach to their career decision-making process.

In addition, the significant positive relationship between Chinese and Canadian acculturation supports the idea that biculturals can incorporate both cultures into their lives. This is consistent with current literature on immigrants in Canada, which suggests that host and heritage acculturation tend to be mildly positively correlated. For example, Berry and Hou's (2016) found that among a sample of 5,000 Canadian immigrants, the majority (68.9%) felt a strong sense of belonging to both Canada and their country of origin; moreover, nearly three-in-ten (28.5%) indicated that they felt a *very strong* sense of belonging to both countries. Jia, Gottardo, Koh, Chen, and Pasquarella (2014) also found a positive correlation ($r = .30$) between heritage and mainstream acculturation among 94 immigrant Chinese adolescents in Canada. It is also worth noting that opposite results have been found with a sample of 231 Chinese American immigrants; Tsai, Ying, and Lee (2000) obtained a negative correlation ($r = -.33$) between heritage and mainstream acculturation. This different pattern of relations underscores the important role of the cultural context and the potential influence of differential policies regarding immigration and cultural diversity in Canada and the United States. These findings suggest that the ideology of the receiving society may play an important role in the perceived compatibility between the heritage and mainstream cultural identities of biculturals.

⁵ We also conducted additional exploratory analysis with other factors that may influence the path model based on correlational results, such as demographic variables like number of years in Canada and legal status. Theoretically, length of stay and legal status could affect one's acculturation level and career identity style, and this was supported by significant bivariate relationships. It should be pointed out that both variables had missing data, which were not missing completely at random. Specifically, number of years in Canada was correlated with normative style ($r = -.22$, $p = .007$), Chinese acculturation ($r = -.17$, $p = .037$), and Canadian acculturation ($r = .44$, $p < .001$). Legal status in Canada was further grouped into international students (1) versus other status (0), including permanent residents, citizens and people with work permits, and was significantly related to normative style ($r = .18$, $p = .014$) and Canadian acculturation ($r = -.33$, $p < .001$). Given the missing data, it was not possible to compute modification index or SRMR when years in Canada and legal status were added to the path model. The results showed a reduced fit to the data ($\chi^2 = 49.774$, $df = 29$, $p = .003$, CFI = .946, NNFI = .898, RMSEA = .064, 90% CI [.035, .092]). According to the output, years in Canada was related only to Canadian acculturation and legal status, and legal status was related only to years in Canada. Because adding these two variables did not change the substance of the model other than the reduced model fit and the nonrandom missing data compromised the model's ability to make statistically sound inferences, we opted not to control for them in the presented model.

Mediating Factors Between Acculturation and Career Identity Styles

Our findings suggest that the relation between Canadian acculturation and informational style can be partly explained by how confident individuals feel about their competency and the degree to which they value intrinsic life goals. Chinese Canadian participants high in Canadian acculturation were higher in self-efficacy and the endorsement of intrinsic life goals, which were, in turn, associated with an informational style. On the other hand, the relation between Chinese acculturation and normative style can be explained by the extent to which individuals felt connected to their families (i.e., allocentrism) and the degree to which they valued extrinsic life goals. This is consistent with previous work demonstrating the relation between family allocentrism and normative style (Lay et al., 1998) and Asian Americans' strong tendency to hold extrinsic goals such as security (Leong, 1991).

In addition to our hypothesised relationships, the results associated with the final path model suggest that the relationship between Canadian acculturation and informational career identity style is not fully explained by self-efficacy and intrinsic goals, given the direct path that emerged between Canadian acculturation and an informational style. Other potentially important mediating factors may be at play to help explain this link and should also be explored in future studies. One factor that could be considered is the role of peers who are also engaging in career decision making. A study with a multicultural sample of undergraduate students in the U.S. showed that attachment to peers, intimacy, and mutuality were significantly correlated with exploration and progress in committing to career choices, above and beyond parental attachment, age, and gender (Felsman & Blustein, 1999).

Another unpredicted path that emerged in our model was the link between Chinese acculturation and an informational career identity style via family allocentrism. It seems that for those who are strongly acculturated to Chinese culture, feeling connected to family increases the likelihood that they would adopt an informational career identity style. One potential explanation for this finding is related to the familial pressure that Chinese parents and relatives place on getting a good education (Liu, 1998). A good education is seen as a prerequisite for a successful career, so seeking as much information as possible about career options is an orientation that would be supported by one's family.

A final unpredicted path in our final model was the negative link between intrinsic life goals and a normative career-identity style. Greater Canadian acculturation was associated with stronger intrinsic life goals, which were then connected to a weaker normative style. This latter finding was unexpected but not necessarily surprising. Individuals with a normative identity style tend to draw from significant others when developing their own goals and identity (Berzonsky, 1989) rather than relying on their own exploration and standards. Thus, it makes sense that those who are more driven by self-focused life goals would be less likely to depend solely on significant others in their own career decision making.

Career Identity Styles and Well-Being

We also found different career identity styles to be linked to aspects of well-being in different ways. Adopting an informational style seemed to be the most beneficial of the three career identity

styles; it was associated with higher eudaimonic well-being and greater meaningfulness of career field. In contrast, those with an avoidant style were lower on both eudaimonic well-being and meaningfulness of career field. This finding is consistent with related work using Marcia's (1966) model, where higher eudaimonic well-being was more strongly linked to an achieved identity status than to a foreclosed identity status (Schwartz et al., 2011). Given that eudaimonic well-being is based on living up to one's potential and functioning to the best of one's capability (e.g., Waterman et al., 2010), it is not surprising that it was most closely linked to the career identity style that focuses most on fulfillment of self-initiated goals.

Similarly, with respect to meaningfulness of career field, our results support the idea that a career chosen after considerable effort of self-directed exploration would be more meaningful to the individual. Some research, however, has found that predictors of well-being may not be consistent across different cultures. As Oishi and Diener (2001) noted, well-being among those with an Asian background tend to be higher when the goals of others are achieved, whereas well-being among European Americans is raised when they themselves are having fun. Much of this previous work, however, has used measures assessing subjective well-being and taps into pleasure-based, hedonic well-being. When it comes to eudaimonic well-being and finding meaning in one's career field—concepts that are rooted in reaching one's potential and self-realization—the individually focused, self-directed nature of informational style may lead to better well-being outcomes for Chinese Canadian bicultural young adults.

Future Directions and Limitations

Our study focused on Chinese biculturals who are at an age when they are likely to be thinking about their careers. The relative cultural uniformity of this sample is one strength of this research, as it allowed us to delve deeper into career-specific issues and examine the specific cultural influences unique to this group. To explore the different aspects of this topic in greater detail, future studies could embrace a more targeted perspective, focusing only on career identity and decision making among international students or temporary workers. To expand and build a bigger picture, it would also be valuable to test our model with other ethnic minority groups with varying cultural values. A particularly interesting avenue of research would be to look beyond student samples and gather insight on individuals who have begun their careers to capture turning points in career paths and how later career decisions may be influenced by culturally based tendencies.

A main limitation of this study stems from the cross-sectional nature of our data. A longitudinal design (from arriving in Canada to working full-time for a few years) would be ideal for gaining a temporal understanding of how career identity styles are influenced by acculturation over time and the underlying mechanisms. Qualitative studies, such as in-depth interviews with individuals indicating significant career shifts, could also be conducted to explore additional factors that may affect the relations between acculturation and career identity styles (e.g., social support). Moreover, we failed to replicate the factor structures of a number of measures among our Chinese bicultural sample. We only found one factor in our adapted meaningfulness of career field measure, which suggests it may not accurately capture the experience of

people at the earlier stage of their career path. Thus, a specifically tailored measure for this population may be more helpful. We also observed that negatively worded items of the family allocentrism scale loaded onto a separate factor, which may reflect response biases or culturally based thinking style (Spencer-Rodgers, Williams, & Kaiping Peng, 2010). Similarly, the failure to replicate the one-factor structure of the eudaimonic well-being scale may mean that the items cannot adequately reflect this concept among Chinese biculturals, suggesting a case of structural inequivalence (van de Vijver & Leung, 1997). Those measurement-related issues represent a continuous challenge in cross-cultural research and call for more cross-culturally validated measures in future research.

This initial investigation successfully relied on a general identity model and measures. In future research, it would be valuable to further examine the role of acculturation using a career-specific identity development model (e.g., Holland, 1997), or including additional career-specific measures (e.g., decision-making self-efficacy) or more career-specific items in the general model (e.g., incorporating some of the items from the level of exploration scale). Overall, although the current study is single-source and cross-sectional, thus likely to be influenced by common method biases (Podsakoff, MacKenzie, Podsakoff, & Lee, 2003), we hope our findings provide a starting point for future research on career identity among bicultural individuals. An important future direction is thus to test the generalizability of this career acculturation model in other bicultural populations.

Conclusion

The current study contributes to the existing body of research on the influence of mainstream and heritage acculturation by examining their relations to Chinese biculturals' career identity styles. Furthermore, the mediating roles of self-efficacy, family allocentrism, and intrinsic and extrinsic life goals lend themselves to a more complex picture of the sociocultural transition that unfolds as young Chinese biculturals integrate into the Canadian workforce. With an increasing number of East Asian youth arriving in Canada for educational or occupational reasons and the fast-growing East Asian Canadian population, it is increasingly important to understand how the early life experiences and unique challenges facing this population contribute to their career choices and decision-making processes in a context that emphasizes different values from those promoted in their country of origin. Among Chinese biculturals who have spent more time in Canada as immigrants or who were born in Canada, studies on this topic will provide valuable insight into how years of acculturation to both mainstream and heritage cultures may relate to an individual's initial career choice and potential changes along the career path.

The findings of this study have implications for different fields. From the perspective of cultural psychology, it provides support for an acculturation framework for examining career decision making. From the perspective of developmental psychology, it explores the identity formation process of emerging adults of Chinese background. In terms of career education and counselling, it emphasizes the importance of practicing cultural competency to help Chinese biculturals find their true personal career aspirations. The career identity styles measure that we adopted may perhaps be a helpful tool for assessing an individuals' career decision-making

process while taking into account the role of acculturation. It may be beneficial for career counselors to encourage emerging adults from East Asian background to increase career exploration in order to facilitate an informational identity style, which may be more adaptive in the Canadian cultural context.

Adopting an acculturation framework that considers career education, assessment, and counselling with multicultural competence could help East Asian young adults not only foster greater self-awareness as they consider their future careers, but also find meaning and purpose in what they choose to do. In addition, the successful transition of Chinese biculturals will benefit Canadian universities, employers and the government's continuing efforts to attract and retain skilled immigrants, international students, and foreign workers to keep the economy growing (Government of Canada, 2017). Enhanced theoretical understanding provided by research on this topic can contribute to development of social programs targeting common issues facing the growing Chinese populations living in Western cultures.

Résumé

Choisir son métier est une importante décision de vie pour un jeune adulte. Cette décision peut s'avérer particulièrement compliquée pour les biculturels ayant accès à deux ensembles de normes culturelles potentiellement conflictuelles. La présente étude a examiné les rôles de l'acculturation de masse et de l'acculturation d'héritage dans un contexte de choix de carrière, pour un échantillon d'adultes émergents chinois biculturels au Canada ($n = 194$). Les résultats ont tout d'abord confirmé la validité d'une mesure modifiée des styles de traitement de l'identité de Berzonsky (1989) dans le domaine des professions. L'analyse des pistes causales a appuyé le modèle que nous avons proposé et a montré que l'acculturation canadienne prédisait un style d'identité professionnelle informationnel alors que l'acculturation chinoise prédisait un style d'identité professionnelle normatif. En outre, l'auto-efficacité et les objectifs de vie intrinsèques influençaient la relation entre l'acculturation canadienne et le style informationnel, alors que l'allocentrisme familial et les objectifs de vie extrinsèques influençaient la relation entre l'acculturation chinoise et le style normatif. Deux parcours n'ayant pas fait l'objet d'hypothèse ont aussi émergé : les objectifs de vie intrinsèques avaient une influence négative sur la relation entre l'acculturation canadienne et le style normatif; l'allocentrisme familial avait une influence sur la relation entre l'acculturation chinoise et le style informationnel. Enfin, le style informationnel était positivement lié au bien-être eudémonique et à l'importance du champ de carrière, alors que les styles normatif et évitant avaient un rapport négatif avec les mesures de bien-être. Dans l'ensemble, cette étude est venue appuyer ce cadre d'acculturation pour l'examen de styles d'identité professionnelle chez les biculturels.

Mots-clés : style d'identité professionnelle, acculturation, Chinois biculturels, bien-être, analyse de piste causale.

References

- Arnold, K. A., Turner, N., Barling, J., Kelloway, E. K., & McKee, M. C. (2007). Transformational leadership and psychological well-being: The

- mediating role of meaningful work. *Journal of Occupational Health Psychology, 12*, 193–203. <http://dx.doi.org/10.1037/1076-8998.12.3.193>
- Baglin, J. (2014). Improving your exploratory factor analysis for ordinal data: A demonstration using FACTOR. *Practical Assessment, Research & Evaluation, 19*(5). Retrieved from <http://pareonline.net/getvn.asp?v=19&n=5>
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*, 122–147. <http://dx.doi.org/10.1037/0003-066X.37.2.122>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology, 46*, 5–34.
- Berry, J. W., & Hou, F. (2016). Immigrant acculturation and wellbeing in Canada. *Canadian Psychology, 57*, 254–264. <http://dx.doi.org/10.1037/cap0000064>
- Berzonsky, M. D. (1989). Identity style: Conceptualization and measurement. *Journal of Adolescent Research, 4*, 268–282. <http://dx.doi.org/10.1177/074355488943002>
- Berzonsky, M. D., Cieciuch, J., Duriez, B., & Soenens, B. (2011). The how and what of identity formation: Associations between identity styles and value orientations. *Personality and Individual Differences, 50*, 295–299. <http://dx.doi.org/10.1016/j.paid.2010.10.007>
- Berzonsky, M. D., Soenens, B., Luyckx, K., Smits, I., Papini, D. R., & Goossens, L. (2013). Development and validation of the revised Identity Style Inventory (ISI-5): Factor structure, reliability, and validity. *Psychological Assessment, 25*, 893–904. <http://dx.doi.org/10.1037/a0032642>
- Bosch, L. A., & Card, N. A. (2012). A meta-analytic review of Berzonsky's identity style inventory (ISI). *Journal of Adolescence, 35*, 333–343. <http://dx.doi.org/10.1016/j.adolescence.2011.08.007>
- Brew, F. P., Hesketh, B., & Taylor, A. (2001). Individualist–collectivist differences in adolescent decision making and decision styles with Chinese and Anglos. *International Journal of Intercultural Relations, 25*, 1–19. [http://dx.doi.org/10.1016/S0147-1767\(00\)00039-0](http://dx.doi.org/10.1016/S0147-1767(00)00039-0)
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications and programming* (2nd ed.). New York, NY: Taylor & Francis.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods, 4*, 62–83. <http://dx.doi.org/10.1177/109442810141004>
- Costello, A. B., & Osborne, J. W. (2011). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation, 10*, 1–9. Retrieved from <http://www.pareonline.net/pdf/v10n7.pdf>
- Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual Review of Psychology, 54*, 403–425. <http://dx.doi.org/10.1146/annurev.psych.54.101601.145056>
- Duriez, B., Luyckx, K., Soenens, B., & Berzonsky, M. (2012). A process-content approach to adolescent identity formation: Examining longitudinal associations between identity styles and goal pursuits. *Journal of Personality, 80*, 135–161. <http://dx.doi.org/10.1111/j.1467-6494.2011.00729.x>
- Erikson, E. H. (1956). The problem of ego identity. *Journal of the American Psychoanalytic Association, 4*, 56–121. <http://dx.doi.org/10.1177/000306515600400104>
- Eryigit, S., & Kerpelman, J. L. (2011). Cross-cultural investigation of the link between identity processing styles and the actual work of identity in the career domain. *Child and Youth Care Forum, 40*, 43–64. <http://dx.doi.org/10.1007/s10566-010-9117-3>
- Felsman, D. E., & Blustein, D. L. (1999). The role of peer relatedness in late adolescent career development. *Journal of Vocational Behavior, 54*, 279–295. <http://dx.doi.org/10.1006/jvbe.1998.1664>
- Garson, G. D. (2012). *Structural equation modeling*. Ashboro, NC: Statistical Associates Publishers.
- Government of Canada. (2017). *Backgrounder: Growing Canada's economic future*. Retrieved from https://www.canada.ca/en/immigration-refugees-citizenship/news/2017/11/growing_canada_seconomicfuture.html
- Hardin, E. E., Leong, F. T. L., & Osipow, S. H. (2001). Cultural relativity in the conceptualization of career maturity. *Journal of Vocational Behavior, 58*, 36–52. <http://dx.doi.org/10.1006/jvbe.2000.1762>
- Ho, D. Y. F. (1996). Filial piety and its psychological consequences. In M. H. Bond (Ed.), *The handbook of Chinese psychology* (pp. 155–165). New York, NY: Oxford University Press.
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Odessa, FL: Psychological Assessment Resources.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1–55. <http://dx.doi.org/10.1080/10705519909540118>
- Jia, F., Gottardo, A., Koh, P. W., Chen, X., & Pasquarella, A. (2014). The role of acculturation in reading a second language: Its relation to English literacy skills in immigrant Chinese adolescents. *Reading Research Quarterly, 49*, 251–261. <http://dx.doi.org/10.1002/rrq.69>
- Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology, 65*, 410–422. <http://dx.doi.org/10.1037/0022-3514.65.2.410>
- Kim, B. S. K., & Omizo, M. M. (2006). Behavioral acculturation and enculturation and psychological functioning among Asian American college students. *Cultural Diversity & Ethnic Minority Psychology, 12*, 245–258. <http://dx.doi.org/10.1037/1099-9809.12.2.245>
- Kline, R. B. (2011). *Principles and practices of structural equation modeling* (3rd ed.). New York, NY: Guilford Press.
- Lay, C., Fairlie, P., Jackson, S., Ricci, T., Eisenberg, J., Sato, T., . . . Melamud, A. (1998). Domain-specific allocentrism-idiocentrism: A measure of family connectedness. *Journal of Cross-Cultural Psychology, 29*, 434–460. <http://dx.doi.org/10.1177/0022022198293004>
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior, 45*, 79–122. <http://dx.doi.org/10.1006/jvbe.1994.1027>
- Leong, F. T. L. (1991). Career development attributes and occupational values of Asian American and white American college students. *The Career Development Quarterly, 39*, 221–230. <http://dx.doi.org/10.1002/j.2161-0045.1991.tb00394.x>
- Leong, F. T. L., & Chou, E. L. (1994). The role of ethnic identity and acculturation in the vocational behavior of Asian Americans: An integrative review. *Journal of Vocational Behavior, 44*, 155–172. <http://dx.doi.org/10.1006/jvbe.1994.1011>
- Leong, F. T. L., & Tata, S. P. (1990). Sex and acculturation differences in occupational values among Chinese-American children. *Journal of Counseling Psychology, 37*, 208–212. <http://dx.doi.org/10.1037/0022-0167.37.2.208>
- Liu, R. W. (1998). Educational and career expectations of Chinese-American college students. *Journal of College Student Development, 39*, 577–588. Retrieved from <https://0-search-proquest-com.mercury.concordia.ca/central/docview/195176181/69870C9D22144D90PQ/1?accountid=10246>
- Lorenzo-Seva, U., & Ferrando, P. J. (2006). FACTOR: A computer program to fit the exploratory factor analysis model. *Behavior Research Methods, 38*, 88–91. <http://dx.doi.org/10.3758/BF03192753>
- Lou, E., Lalonde, R. N., & Wong, J. Y. (2015). Acculturation, gender, and views on interracial relationships among Chinese Canadians. *Personal Relationships, 22*, 621–634. <http://dx.doi.org/10.1111/per.12099>

- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 3, 551–558. <http://dx.doi.org/10.1037/h0023281>
- Marjanovic, Z., Holden, R., Struthers, W., Cribbie, R., & Greenglass, E. (2015). The inter-item standard deviation (ISD): An index that discriminates between conscientious and random responders. *Personality and Individual Differences*, 84, 79–83. <http://dx.doi.org/10.1016/j.paid.2014.08.021>
- Mau, W. C. J. (2000). Cultural differences in career decision-making styles and self-efficacy. *Journal of Vocational Behavior*, 57, 365–378. <http://dx.doi.org/10.1006/jvbe.1999.1745>
- Mau, W. C. J. (2004). Cultural dimensions of career decision-making difficulties. *The Career Development Quarterly*, 53, 67–77. <http://dx.doi.org/10.1002/j.2161-0045.2004.tb00656.x>
- Oishi, S., & Diener, E. (2001). Goals, culture, and subjective well-being. *Personality and Social Psychology Bulletin*, 27, 1674–1682. <http://dx.doi.org/10.1177/01461672012712010>
- Olsson, U. (1979). On the robustness of factor analysis against crude classification of the observations. *Multivariate Behavioral Research*, 14, 485–500. http://dx.doi.org/10.1207/s15327906mbr1404_7
- Park, S. E., & Harrison, A. A. (1995). Career-related interests and values, perceived control, and acculturation of Asian-American and Caucasian-American college students. *Journal of Applied Social Psychology*, 25, 1184–1203. <http://dx.doi.org/10.1111/j.1559-1816.1995.tb02613.x>
- Phinney, J. S., & Baldelomar, O. A. (2011). Identity development in multiple cultural contexts. In L. A. Jensen (Ed.), *Bridging cultural and developmental approaches to psychology: New syntheses in theory, research, and policy* (pp. 161–186). New York, NY: Oxford University Press.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879. <http://dx.doi.org/10.1037/0021-9010.88.5.879>
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539–569. <http://dx.doi.org/10.1146/annurev-psych-120710-100452>
- Preacher, K. J., & MacCallum, R. C. (2003). Repairing Tom Swift's electric factor analysis machine. *Understanding Statistics*, 2, 13–43. http://dx.doi.org/10.1207/S15328031US0201_02
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54–67. <http://dx.doi.org/10.1006/ceps.1999.1020>
- Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of Personality and Social Psychology*, 79, 49–65. <http://dx.doi.org/10.1037/0022-3514.79.1.49>
- Ryder, A. G., Alden, L. E., Paulhus, D. L., & Dere, J. (2013). Does acculturation predict interpersonal adjustment? It depends on who you talk to. *International Journal of Intercultural Relations*, 37, 502–506. <http://dx.doi.org/10.1016/j.ijintrel.2013.02.002>
- Schwartz, S. J. (2016). Turning point for a turning point: Advancing emerging adulthood theory and research. *Emerging Adulthood*, 4, 307–317. <http://dx.doi.org/10.1177/2167696815624640>
- Schwartz, S. J., Beyers, W., Luyckx, K., Soenens, B., Zamboanga, B. L., Forthun, L. F., . . . Waterman, A. S. (2011). Examining the light and dark sides of emerging adults' identity: A study of identity status differences in positive and negative psychosocial functioning. *Journal of Youth and Adolescence*, 40, 839–859. <http://dx.doi.org/10.1007/s10964-010-9606-6>
- Shen, F. C., Liao, K. Y., Abraham, W. T., & Weng, C. Y. (2014). Parental pressure and support toward Asian Americans' self-efficacy, outcome expectations, and interests in stereotypical occupations: Living up to parental expectations and internalized stereotyping as mediators. *Journal of Counseling Psychology*, 61, 241–252. <http://dx.doi.org/10.1037/a0036219>
- Spencer-Rodgers, J., Williams, M. J., & Kaiping Peng. (2010). Cultural differences in expectations of change and tolerance for contradiction: A decade of empirical research. *Personality and Social Psychology Review*, 14, 296–312. <http://dx.doi.org/10.1177/1088868310362982>
- Statistics Canada. (2017). *Immigrant population by selected places of birth, admission category and period of immigration, Canada, provinces and territories, census metropolitan areas and areas outside of census metropolitan areas. 2016 Census Program* (Catalogue no. 98–400-X2016202). Retrieved from <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/dv-vd/imm/index-eng.cfm>
- Steger, M. F., Dik, B. J., & Duffy, R. D. (2012). Measuring meaningful work: The work and meaning inventory (WAMI). *Journal of Career Assessment*, 20, 322–337. <http://dx.doi.org/10.1177/1069072711436160>
- Stevenson, H. W., & Lee, S. Y. (1996). The academic achievement of Chinese students. In M. H. Bond (Ed.), *The handbook of Chinese psychology* (pp. 124–142). New York, NY: Oxford University Press.
- Tang, M., Fouad, N. A., & Smith, P. L. (1999). Asian Americans' career choices: A path model to examine factors influencing their career choices. *Journal of Vocational Behavior*, 54, 142–157. <http://dx.doi.org/10.1006/jvbe.1998.1651>
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- Tsai, J. L., Ying, Y. W., & Lee, P. A. (2000). The meaning of “being Chinese” and “being American” variation among Chinese American young adults. *Journal of Cross-Cultural Psychology*, 31, 302–332. <http://dx.doi.org/10.1177/0022022100031003002>
- Tyson, W., Lee, R., Borman, K. M., & Hanson, M. A. (2007). Science, technology, engineering, and mathematics (STEM) pathways: High school science and math coursework and postsecondary degree attainment. *Journal of Education for Students Placed at Risk*, 12, 243–270. <http://dx.doi.org/10.1080/10824660701601266>
- Van de Vijver, F. J., & Leung, K. (1997). *Methods and data analysis for cross-cultural research* (Vol. 1). Thousand Oaks, CA: SAGE.
- Vleioras, G., & Bosma, H. A. (2005). Are identity styles important for psychological well-being? *Journal of Adolescence*, 28, 397–409. <http://dx.doi.org/10.1016/j.adolescence.2004.09.001>
- Waterman, A. S., Schwartz, S. J., Zamboanga, B. L., Ravert, R. D., Williams, M. K., Agocha, V. B., . . . Donnellan, M. B. (2010). The questionnaire for eudaimonic well-being: Psychometric properties, demographic comparisons, and evidence of validity. *The Journal of Positive Psychology*, 5, 41–61. <http://dx.doi.org/10.1080/17439760903435208>
- West, A. L., Zhang, R., Yampolsky, M., & Sasaki, J. Y. (2017). More than the sum of its parts: A transformative theory of biculturalism. *Journal of Cross-Cultural Psychology*, 48, 963–990. <http://dx.doi.org/10.1177/0022022117709533>

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