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Career motivation as mediator between cultural self-construal and interest

Mengxuan Zhang

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CAREER MOTIVATIONS AS A MEDIATOR BETWEEN CULTURAL SELF-
CONSTRUAL AND INTEREST CONGRUENCE

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Psychological Science

by
Mengxuan Zhang
May 2024

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ABSTRACT

Understanding the association between career motivations and interest-occupation congruence can help people with different cultural backgrounds make better career decisions. The goal of the study was to examine how cultural differences predicted interest congruence, and whether career motivation was a significant mediator in the prediction. I hypothesized that independent self-construal would be associated with internal career motivation most strongly (H1), while interdependent self-construal will be associated with interpersonal career motivation most strongly (H2). Additionally, internal career motivation would mediate the relationship between independent self-construal and interest congruence (H3), and whether internal career motivation mediated the relationship between interdependent self-construal and interest congruence would be explored (H4). In total 393 participants completed the questionnaire. The results indicated that career motivations are associated with cultural self-construals, but career motivations were not a significant mediator between self-construal and interest-occupation congruence. The study contributed to future research about career decisions.

Keywords. cultural self-construal, career motivations, interest-occupation congruence

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Lastly, I would like to acknowledge the participants of this study for their willingness to contribute their time and insights, without which this study would not have been possible.

DEDICATION

To my dear husband Farshid Hosseini, and our precious daughter Helena,

You both fill my life with an abundance of love, joy, and inspiration.

Farshid, your encouragement and belief in my ability have given me the strength to pursue my academic journey. Helena, you are a beacon of light in our lives, illuminating every moment with your innocence and wonder. Your arrival has brought a new purpose and depth to my journey, reminding me of the beauty and resilience of life. As I pen down these words, I do so with the hope of creating a better world for you to grow and thrive in.

To my beloved parents and brother

Your boundless love and unwavering belief in me have been my greatest treasures. This thesis is dedicated to you with deepest gratitude for your endless support.

With all my heart,

Mengxuan

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CHAPTER ONE

INTRODUCTION

Background

In a lifetime, people spend a large portion of time working. Imagining a full-time employee starts working from 22 years old, they will spend more than 90,000 hours until retirement (67 years old), which is about one-third of the lifetime. The significant time people spend at work makes career-interest fit an important element in career life. If a person works in an occupation that fits their interests, they might have higher enjoyment when they are working and have higher job satisfaction. Existing studies have found that employees from different ethnic backgrounds experience their jobs differently (Koh et al., 2016). For example, Ng et al. (2009) found workers reported higher job satisfaction and better performance in cultures that are individualistic, low-power-distance, low uncertainty avoidance, and masculine. One of the explanations for the differences in working experiences could be that people who experience higher job satisfaction chose a job that fit their established interests.

Abundant research has shown that people are more satisfied with their jobs when they choose a career that matches their interests (Allen & Robbins, 2010; Fricko & Beehr, 1992; Kristof-Brown et al., 2005). However, the relationship between interests and career choices may not universally apply to everyone. Culture also plays an important role in making career decisions. People with different cultural perspectives could be motivated by various factors,

which could affect how well their job matches their interests, which influence their work experiences. Therefore, it is important to study how cultural differences relate to people's interests-career match. When creating career plans or working in a role, people may struggle to balance their self-interests and values with fulfilling the expectations of others. Following their personal wishes could lead to better work experience. However, it is also possible that people who choose jobs based on others' expectations are fulfilled by satisfying the wishes of people who are close to them. For example, a person may feel successful because they follow their parents' wish and become a doctor. This work investigates the connections between career motivations, interests, and cultural self-construals to better understand these decision-making dynamics.

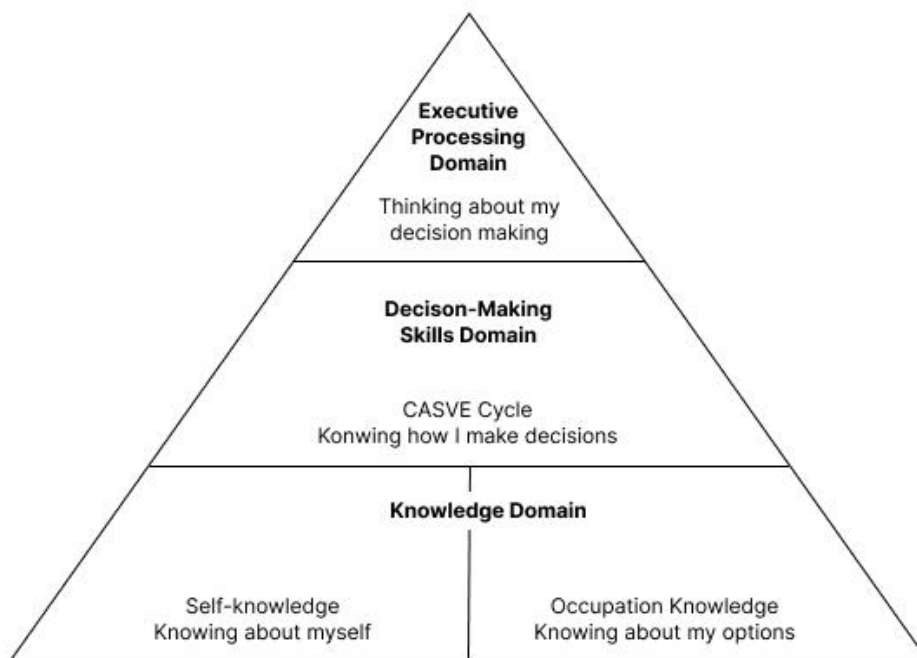
Cultural Differences in Career Motivations

Cultural differences play important roles in the process of making career decisions. Nevertheless, in many vocational counseling settings, individuals' cultural backgrounds are not given as much weight as other factors such as interests or values. An example of a popular method universities use to help students to make their career plans is the CASVE Cycle, which is based on Cognitive Information Processing (CIP) theory (see Figure 1; Werner, 2021). Through the CASVE cycle, the process encourages individuals to explore their career motivations such as personal career value, interest, skills, personality, and so forth; but only one of 42 items measures cultural differences – *Who I am (e.g., culture, place in the community and society) fits with the options I am*

considering. Methods like the CASVE Cycle pay limited attention to cultural differences and might not apply to everyone, especially when the United States is an immigrant country with many cultural communities.

Figure 1

The components of cognitive information processing (CIP) theory.



Notes. The CASVE cycle is the decision-making skills domain of the CIP theory;
C = communication, A = analysis, S = synthesis, V = valuing, E = execution.

In studies of cultural differences, two important dimensions are independent self-construal (individualistic personality) and interdependent self-construal (collectivistic personality). Prior studies (Kam et al., 2012; Markus & Kitayama, 1991; Markus & Conner, 2014) have supported that the two cultural dimensions are not independent from each other; many individuals possess a dual awareness of themselves, acknowledging both their independence and interdependence. However, individuals usually express higher levels of one self-construal over the other one based on their cultural backgrounds or the specific context. Research on career decisions has recognized that individuals' cultural differences affect their behaviors, thoughts, and decision making.

In general, individuals with independent self-construal are more likely to be influenced by needs and rights of the self; while individuals with interdependent self-construal are more likely to be influenced by the needs of groups, such as family, society, and so forth (Akosah-Twumasi et al., 2018; Aykan & Fikret-Pasa, 2003; Leal-Muniz & Constantine, 2005; Wüst & Šimić, 2017). These different motivating factors are described by the three-dimensional model of career choices (Beynon et al., 1998; Carpenter & Foster, 1979). The three dimensions include internal, interpersonal, and external. Internal career motivation indicates personal values and wishes (e.g., my personal values), and person-job fit (e.g., my skills and abilities). Interpersonal career motivation includes the expectations from family and significant others, such as expectations of parents and best friends. Finally, external career motivation

includes market conditions and financial and professional contributions of the job, such as the market gaps, opportunities, and salary (Aycan & Fikret-Pasa, 2003).

Studies have found when making career-related decisions, individuals high in interdependent self-construal were more likely to be influenced by family and society aspects, such as family goals, family members' involvement, cultural expectation, and peers (Brown, 2004; Constantine et al., 2005; Guan et al., 2015; Leal-Muniz & Constantine, 2005; Li et al., 2015; Savani et al., 2012; Wüst & Šimić, 2017). In comparison, people high in independent self-construal were more likely to be affected by internal factors, such as personal values and wishes (Akosah-Twumasi et al., 2018; Aycan & Fikret-Pasa, 2003; Karimi et al., 2021; O'Keefe et al., 2022). To design the current work, a pilot study was conducted to examine how cultural self-construals relate to career motivations and the career decision process among university students. Participants with higher independent self-construal (individualistic) were more motivated by internal factors (e.g., personal values, abilities, and wishes, etc.); while participants with higher interdependent self-construal (collectivistic) were more motivated by interpersonal factors (e.g., the expectation of parents and friends, role models, etc.). Consistent with previous studies (Kam et al., 2012) which collected data from both university students and employed adults from 38 countries, independent and interdependent self-construals also were positively correlated. Based on existing studies, considering individuals' cultural differences is necessary when providing consultations or giving career suggestions. Further

studies are needed to investigate how cultural differences could affect people's career motivations and decisions.

Interest Congruence

Besides cultural differences, interest is another factor that has a significant influence on people's career decisions and is central to many career-decision assessments and theories. For example, the first step of the CASVE Cycle is Knowing About Myself, which includes knowing someone's values, interests, skills, and employment preferences. A recent study (Werner, 2021) found that the valuing factor of the CASVE Cycle (part of CIP) had high validity ($\alpha = .80$), this factor emphasized the career choice a person made matches their values, skills, interests, lifestyle, personality and so forth. With the importance of considering interest matches in making career decisions, various studies have been conducted to find the relationship between interest and career decisions (Holland, 1997; Kantamneni & Fouad, 2013; Soh & Leong, 2001). In psychology research, interest-congruence is often assessed with the RIASEC model (Holland, 1997), which measures interest from six dimensions, including realistic (R), investigative (I), artistic (A), social (S), enterprising (E), and conventional (C). The six items of RIASEC model represent people's job personality traits, people usually have one to three personality traits preference. For example, if someone has a high score in investigative category, the person may be recommended to seek jobs in information technology, education, innovative companies, or

healthcare; or a person could score high in multiple interest areas at the same time.

Many researchers have been interested in looking at the relationship between interest congruence and career outcomes. After analyzing 92 studies, Nye et al. (2017) indicated that interest congruence was a strong variable in predicting job performance. Interest congruence indicates whether an individual's interests match the occupation they are pursuing. For example, if a person does not feel comfortable interacting and talking with people but trying to be a human resource manager, which requires connecting with people frequently, then the person has a low interest-congruence. High interest-congruence has been found associated with higher academic and occupational performance (Ertl et al., 2022; Nye et al., 2017). Allen and Robbins (2010) found that students with higher interest-major congruence were more persistent and enthusiastic about their courses, the result was consistent with the findings of Kristof-Brown et al. (2005), that stronger interest-occupation congruence of employees predicted better outcomes in work.

Additionally, studies also found interest differences in association with cultural backgrounds. Through a study of Asian Indian college students, Gupta and Tracey (2005) found that Indian Americans reported lower interest congruence because they were mainly motivated by traditional stance, family values, and sense of duty to the society. Another study about South Asian Americans also indicated that compared to realistic (from RIASEC model), South

Asian American males were more interested in investigative occupations because of the prestige of their culture (Kantamneni & Fouad, 2013). A study compared White American (independent/individualistic) and Chinese (interdependent/collectivistic) students and found the validity of the six items of RIASEC had no differences between the samples (Soh & Leong, 2001). The current study will use the RIASEC model to measure interest preference and compare how well the career they are currently in or pursuing matches their personal interest. Based on prior research, studying how interest-congruence relates to cultural differences is necessary, as people making career plans could struggle between the internal and interpersonal factors at the same time, or they still could have interest-occupation congruence even if they were motivated by interpersonal elements. Looking at how career motivations relate to people's interest-occupation congruence from different cultures could help understand their circumstances and support better career decision-making.

Current Study

Limited research has investigated individuals' cultural differences related to interest-congruence, the role of culture associated with interest congruences, and how career motivations play role in between. Hence, one of the goals of the current study is to explore the relationship between cultural differences and interest-occupation congruence with career motivations as the mediator. Furthermore, the study will distinguish cultural differences at the individual level. In most existing studies, cultural differences were distinguished by the ethnicities

and regions; for example, people were identified as a collectivistic (or interdependent) culture when they are Chicano, Mexican American, Latino, and so forth (Brown, 2004; Leal-Muniz & Constantine, 2005). However, previous work provided support that dividing people's ethnicities and regions might not be accurate, Aycan et al. (2003) conducted a study with Turkish university students (Turkey belongs to collectivistic culture) and found that most students had a higher score in independent scale, which means their thoughts were more likely to be individualistic. To measure cultural differences accurately, the current study measures the cultural differences at an individual level with self-construal (independent and interdependent). Additionally, the current study will use a more comprehensive sample instead of focusing on student populations. The participants will be recruited online with various employment statuses.

I hypothesize that the relationship between cultural self-construal and interest-occupation congruence will be partially mediated by career motivation (see Figure 2). More specifically:

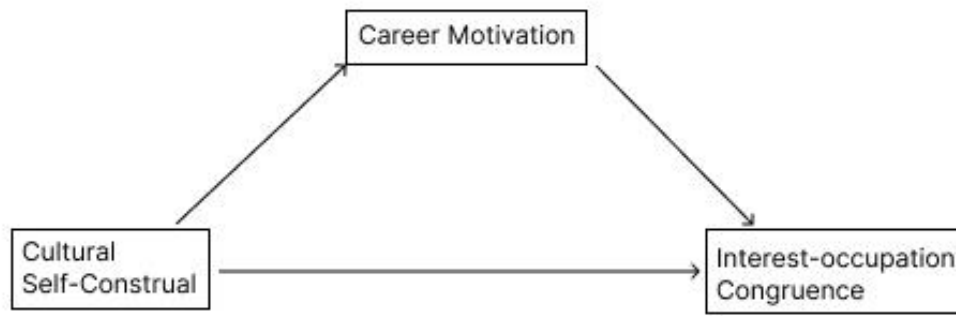
H1) Independent self-construal will be most strongly associated with internal career motivation;

H2) Interdependent self-construal will be most strongly associated with interpersonal career motivation;

H3) Internal career motivation will mediate the relationship between independent self-construal and interest-congruence.

Figure 2

Conceptual model of the current study



Whether interpersonal career motivation is a mediator between interdependent and interest-congruence is unknown. On an exploratory basis, Hypothesis 4 (H4) will test whether interpersonal career motivation mediates the relationship between interdependent and interest-congruence (see Figure 3).

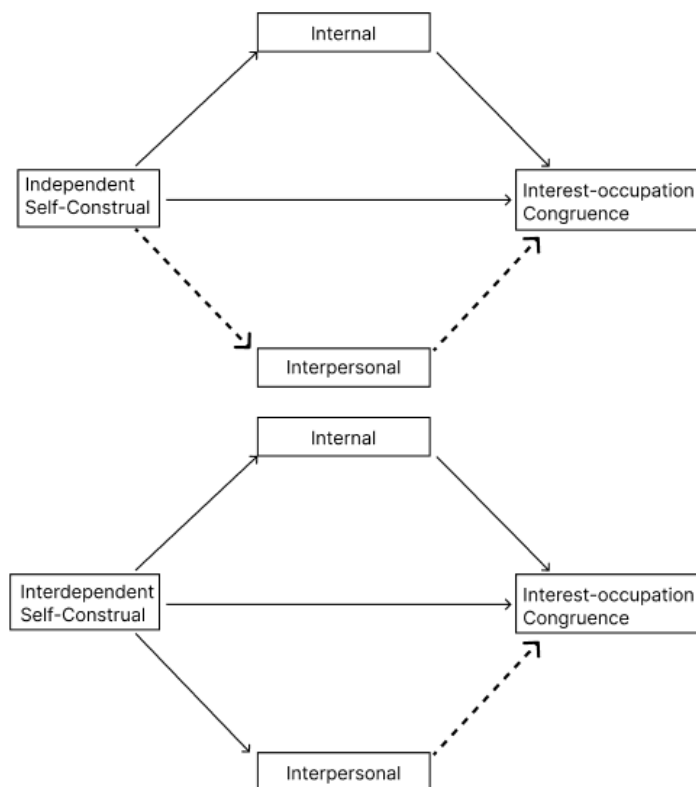
Pilot Study

A pilot study was conducted to measure whether cultural differences are related to career motivations, and whether interests explain the relationship between cultural self-construal and career motivation. A total of 316 students from California State University, San Bernardino were recruited to complete an online survey. The survey included four scales that measured participants' self-construals (independent and interdependent), career motivations (internal,

interpersonal, & external), and interests (measured by RIASEC and Person and Thing Orientations). Overall, the study provided support for the current study by finding that cultural self-construal predicted career motivation beyond career-related individual differences in interests.

Figure 3

Models tested in the current study



Notes. Solid lines indicate predicted significant relationships; dashed lines indicate predicted non-significant relationships

In the pilot study, independent and interdependent self-construals were significantly correlated ($r = .18, p < .05$). Additionally, cultural self-construals significantly predicted career motivations. People higher in independent self-construal tended to be guided by internal factors such as interests, $r(314) = .43, p < .001$. In contrast, people higher in interdependent self-construal tended to be guided by interpersonal factors, such as family's expectations, $r(314) = .48, p < .001$.

In a multiple regression model including both self-construal and interests, the relationships between self-construal and career motivations remained significant (Independent—internal: $\beta = .39, p < .001, R^2 = .24$; Interdependent—interpersonal: $\beta = .42, p < .001, R^2 = .56$). The pilot study indicated that factors motivating people in making career decisions differ based on their cultural self-construal. Individuals with higher independent self-construal tend to be motivated by self-values and interests, while those with higher interdependent self-construal tend to be motivated by others' opinions and expectations. The current study extended from the pilot study with more comprehensive samples to further examine whether interest congruence relates differently to independent and interdependent self-construal, and whether career motivations mediate the association between cultural self-construal and interest-occupation congruence.

CHAPTER TWO

METHODS

Participants

The anticipated sample size was 350 participants. Adults 30 years old or younger who were currently employed or seeking employment and live in the United States were eligible to participate. In total, 405 participants were recruited through the Prolific online survey platform. The final cleaned sample size was $N = 393$ after excluding participants who did not finish the survey, did not pass quality checks, or did not provide sufficient occupation information. Among the participants, there were 183 (46.6%) males, 197 (50.1%) females, and 13 (3.3%) who reported a non-binary gender. The age range of the participants was from 18 years old to 30 years old ($M = 25.6$, $SD = 3.18$). The racial and ethnic identities of participants included 63.9% White/Caucasian, 12% Asian, 10.7% Black/African American, 7.9% multi-ethnic/multi-racial, 5.3% Hispanic/Latino/Latina, and 0.3% Middle Eastern/Indian. More than half of participants had a college degree, with 0.9% less than high school, 16.9% high school diploma or GED, 25.1% some college without degree, 5.2% associate's degree, 39.7% of bachelor's degree, 10.5% master's degree, and 1.7% doctorate or professional degree. The employment status of the participants included full-time (63.9%), part-time (20.9%), and unemployed but seeking (15.3%). Further work-related demographic information is shown in Table 1.

Table 1*Work-related demographics*

Items	Percentage (%)
Current Employment Status (N = 393)	
Full-time	63.9
Part-time	20.9
Unemployed and seeking job	15.3
Time Worked in Current Position (n = 333)	
1 month or less	1.2
1 to 6 months	12.9
6 months to 1 year	12.9
1 to 2 years	29.4
2 to 5 years	32.7
More than 5 years	10.8
Experience Level of Current Position (n = 333)	
Entry level	45.9
Mid-level	48.6
Senior / Executive level	5.4

Measurements

Two demographic categories were asked including general demographics and work-related demographics questions. General demographic questions for the participants included gender, age, ethnicity, and education level. The work-related demographic questions asked about employment status of the participants, their current job position, time working in the current position, experience level, and job satisfaction. Next, participants were asked “*Is your current job your ideal job, or are you planning to pursue a different one?*” with options of “*Yes, this is my ideal position*” or “*No, I am planning to pursue a*

different one.” If participants were actively job-seeking or planning to pursue a different position, they were asked to indicate their ideal position. Additionally, participants were asked to select their current or ideal position from a list of career industries and specific occupations from the O*NET database, with the instructions: “*Please choose the industry category from the list that best matches or closely describes [your current position/the position you intend to pursue].*” Then, participants were shown a list of job titles within their selected industry and asked to select the position that best matched their current or pursued job. The options included 23 career industries (O*NET job families), each encompassing 7 to 107 job titles. For example, if participants selected “Management Occupations” as their industry category, they would see job title options such as public relations managers, supply chain managers, and chief executives.

To measure cultural differences, career motivations, and career-related interests, three sets of questionnaires were asked. First, the *Self-Construal Scale* (Kitayama et.al., 2014; Singelis, 1994) was used to measure the cultural perspective of each participant. The questionnaire is a 7-point Likert scale with 30 items, including two subscales (independent and interdependent). There were 15 items to measure independent self-construal with statements such as “*I enjoy being unique and different from others in many respects,*” or “*I do my own thing, regardless of what others think,*” and the other 15 items were used to measure interdependent self-construal with questions such as “*Even when I strongly disagree with group members, I avoid an argument.*” The participants were asked

to rate each statement on a scale from 1 “*strongly disagree*” to 7 “*strongly agree*” (see Appendix A). For scoring, the items for each subscale were added first, then averaged by dividing the sum by the number of items in the subscale.

Career motivations were measured with the *Three-Dimensional Inventory* (Aycan & Fikret, 2003). The questionnaire is a 5-point Likert scale with 21 items (1 = *not important at all*, 5 = *extremely important*). There were three subscales including internal, interpersonal, and external career motivations. The internal subscale had eight items, such as “*My personal values*,” “*My skills and abilities*,” the interpersonal subscale had seven items, such as “*My father’s expectations of me*,” “*My role models*,” and the external subscale had six items, such as “*Market gaps and opportunities*.” The average score of each subscale was calculated (see Appendix B).

Interest congruence was calculated based on the procedures from *O*NET Interest Profiler Manual* (Rounds et al., 2021). First, participants were asked to choose the occupation they were currently in or planning to pursue from the career cluster database (O*NET), which includes 974 occupation titles paired with the RIASEC profile. Secondly, participants completed the *O*NET Interest Profiler Short Form* (RIASEC; Holland, 1997; O*NET) which includes six interest categories (realistic, investigative, artistic, social, enterprising, and conventional) with 10 questions for each interest categories (see Appendix C). Finally, to obtain the interest congruence, a r_{XY} score was calculated to indicate the similarity between the participant’s interest profile and the occupation they chose.

In addition to the congruence of individual interests with their occupation, family congruence was also measured to assess similarity between individuals' career plans and their family's expectations. The supplementary congruence subscale from the *Adolescent-Parent Career Congruence Scale* (Sawitri et al., 2013) was adapted in current study to measure the family career congruence. Because the task of the measurement in the current study was to assess the influence of family, the items in subscale were reworded. The "parents" in the statements were replaced by "family", for example, the statement "*I am interested in the career areas that my parents expect me to enter*" was changed to "*I am interested in the career areas that my family expects me to enter.*" This measure is a 5-point scale with 5 items (1 = *strongly disagree*, 5 = *strongly agree*). The average score of the subscale was computed which represented the related characteristics that shared between individuals and their family (see Appendix D). The associations between family congruence and cultural self-construals were measured to verify that family-based career considerations are weighted differently based on independent and interdependent self-construals.

Procedure

The participants were tested remotely and independently. After participants consented to participate, the work-related demographic questions were collected. Next, cultural self-construal, career motivations, interest-occupation congruence, and family career congruence were measured. Finally, general demographic questions were asked, and participants were thanked for

their contribution to the study. Three attention check questions were included in the survey to monitor data quality. All retained participants correctly answered two or more of the attention checks.

Design and Data Analysis

Multiple regression analysis was used to test Hypotheses 1 and 2. Mediation models (Hypotheses 3 and 4) were tested by using the PROCESS macro for SPSS (Hayes, 2017). The independent variables of the study were independent and interdependent cultural self-construals. Independent self-construal represents someone's thinking is apt to individualism, while the interdependent self-construal represents someone's thinking is apt to collectivism.

The main dependent variable in this study was interest-occupation congruence. A correlation score was computed to indicate how strong a person's self-interest and the occupation they chose or pursuing match. According to O*NET, each occupation of the 974 occupation titles had respective RIASEC scores, for instance, the RIASEC score for Chief Executive is R = 1.33, I = 2, A = 2.67, S = 3.67, E = 7, C = 5.33, and for sales managers is R = 3, I = 2, A = 2, S = 3.67, E = 7, C = 4.67. The calculation process was indicated by *O*NET Interest Profiler Manual* (Rounds et al., 2021), the similarity of individuals' interest profile and the occupational profile was calculated based on the mathematical formula $r_{XY} = \frac{\sum (X - \bar{X})(Y - \bar{Y})}{(N\sigma_X \sigma_Y)}$. In this formula, the X indicated the participant's interest profile (including X_R , X_I , X_A , X_S , X_E , and X_C), while the Y indicated the

occupational profile (including Y_R , Y_I , Y_A , Y_S , Y_E , and Y_C). The \bar{X} was the mean score of participant's interest profile, each participant had different mean score based on their interest profile; and \bar{Y} was the mean score of occupational profile. The N indicates the scores that were used to the calculation of participants' profile ($N = 6$ in the current study), the σ_X and σ_Y represent the standard deviation of participants and occupation profiles. The correlation range is from -1 to +1, with +1 indicating the highest interest congruence level.

In the current study, the key mediators were internal career motivations and interpersonal career motivations. Internal career motivation contained factors such as personal value, interest, and so forth; interpersonal career motivation included expectations from others. External career motivation was used as a covariate in some analyses.

CHAPTER THREE

RESULTS

Results

The purpose of the current study was to investigate how cultural self-construals are associated with interest congruence, and whether career motivations significantly mediate these associations. The current study hypothesized that self-construal would predict career motivations: H1 hypothesized independent self-construal would have stronger associations with internal career motivation; H2 hypothesized that interdependent self-construal would have stronger associations with interpersonal career motivation. The study also tested whether internal and interpersonal career motivations significantly mediate the association between self-construal and interest congruence (H3 and H4). Overall, the results indicated that the hypotheses of the study were partially supported.

Scale Reliabilities and Bivariate Correlations

In total, four key constructs were measured, including six sub-scales and one congruence index. The reliabilities for the sub-scales were high: cultural self-construal (independent: $\alpha = .82$; interdependent: $\alpha = .85$), career motivations (internal: $\alpha = .76$; interpersonal: $\alpha = .90$; external: $\alpha = .76$) and family career congruence ($\alpha = .92$) (see Table 2).

Table 2*Descriptive statistics of study variables*

	<i>M (SD)</i>	<i>α</i>
1. Independent self-construal (15 items)	5.03 (.77)	0.82
2. Interdependent self-construal (15 items)	4.75 (.83)	0.85
3. Internal career motivation (8 items)	3.72 (.60)	0.76
4. Interpersonal career motivation (7 items)	2.13 (.95)	0.90
5. External career motivation (6 items)	3.58 (.66)	0.76
6. Interest-occupation congruence	0.25 (.45)	--
7. Family career congruence (5 items)	3.01 (1.07)	0.92

Notes. ** $p < .01$; * $p < .05$; α = Cronbach's alpha

Table 2 (Continued)*Descriptive statistics of study variables*

	Correlation						
	1	2	3	4	5	6	7
1. Independent self-construal (15 items)	1						
2. Interdependent self-construal (15 items)	.176**	1					
3. Internal career motivation (8 items)	.505**	.299**	1				
4. Interpersonal career motivation (7 items)	.232**	.551**	.394**	1			
5. External career motivation (6 items)	.373**	.313**	.542**	.417**	1		
6. Interest-occupation congruence	-0.039	-0.088	0.011	-0.054	-0.057	1	
7. Family career congruence (5 items)	.100*	.402**	.233**	.407**	.196**	0.041	1

Notes. ** $p < .01$; * $p < .05$; α = Cronbach's alpha

Independent and interdependent self-construal were significantly correlated ($r = .18, p < .05$). Not as expected, interest-occupation congruence was not significantly correlated with any other variables (see Table 2). Additionally, there was not a significant difference in interest-occupation congruence between participants who reported being in their ideal position ($n = 152, M_{congruence} = .20$) compared to participants planning to pursue a different position ($n = 181, M_{congruence} = .27$); $t(331) = -1.45, p = .074$. However, family-career congruence was significantly higher for participants in their ideal position, $t(331) = 2.01, p = .045$, Cohen's $d = 0.22$.

Cultural Self-Construal and Career Motivations

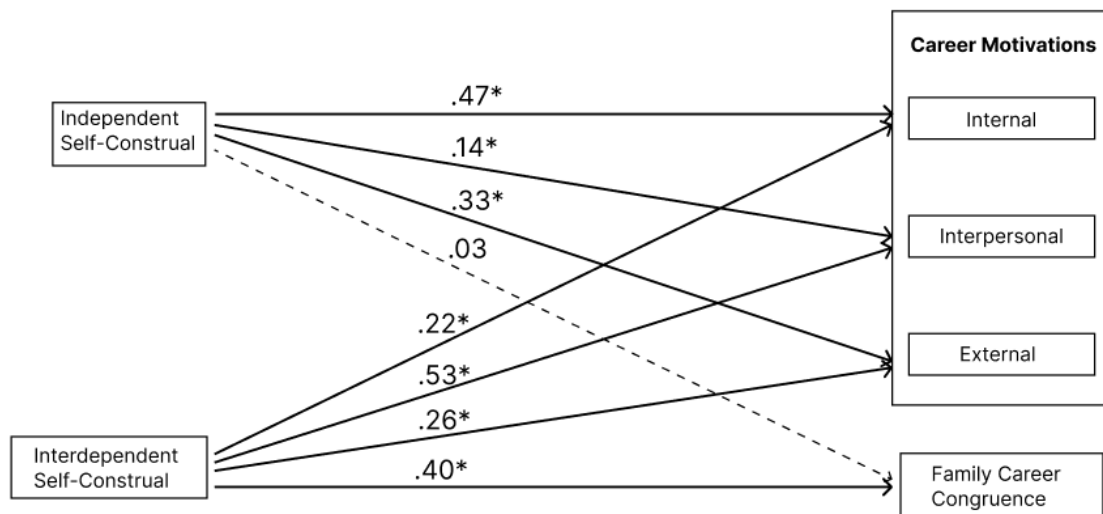
Multivariate regression analysis was used to test H1 and H2. The independent and interdependent self-construals were entered simultaneously as predictors of career motivations (internal, interpersonal, and external). Overall, cultural self-construals were significantly related to career motivations (internal: $R^2 = .301, p < .05$; interpersonal: $R^2 = .322, p < .05$; external: $R^2 = .202, p < .05$). As hypothesized in H1, independent self-construal was most strongly associated with internal career motivation ($\beta = .47, t(390) = 10.86, p < .05$) compared to interpersonal career motivation ($\beta = .14, t(390) = 3.29, p < .05$). As expected, individuals higher in independent self-construal were more strongly motivated by internal factors when making career decisions.

H2 was also supported. The interdependent self-construal was most strongly associated with interpersonal career motivation ($\beta = .53, t(390) = 12.42$,

$p < .05$) compared to internal career motivation ($\beta = .22$, $t(390) = 5.04$, $p < .05$). Additionally, independent self-construal was significantly related to external career motivation ($\beta = .33$, $t(390) = 7.13$, $p < .05$), which was slightly stronger than the association of interdependent self-construal and external career motivation ($\beta = .26$, $t(390) = 5.56$, $p < .05$) (see Figure 4).

Figure 4

Associations between self-construals and career motivations



Notes. * $p < .05$; Coefficients represent standardized regression values. Solid lines indicate significant relationships; dashed lines indicate not-significant relationships.

Career Motivations as Mediators Between Self-Construal and Interest Congruence

H3 and H4 were tested using mediation models with career motivations (internal and interpersonal) as mediators between self-construal and career congruence. The results did not support H3 and H4, including when external career motivation was used as a covariate. Contrary to expectations, career motivations did not significantly mediate the relationship between cultural self-construal and interest-occupation congruence. The average score of interest congruence in the current study was low, and standard deviation is large ($M = .25$, $SD = .45$); however, the low score and larger standard deviation was in line with the previous studies (Ertl et al., 2022; Gupta & Tracey, 2005).

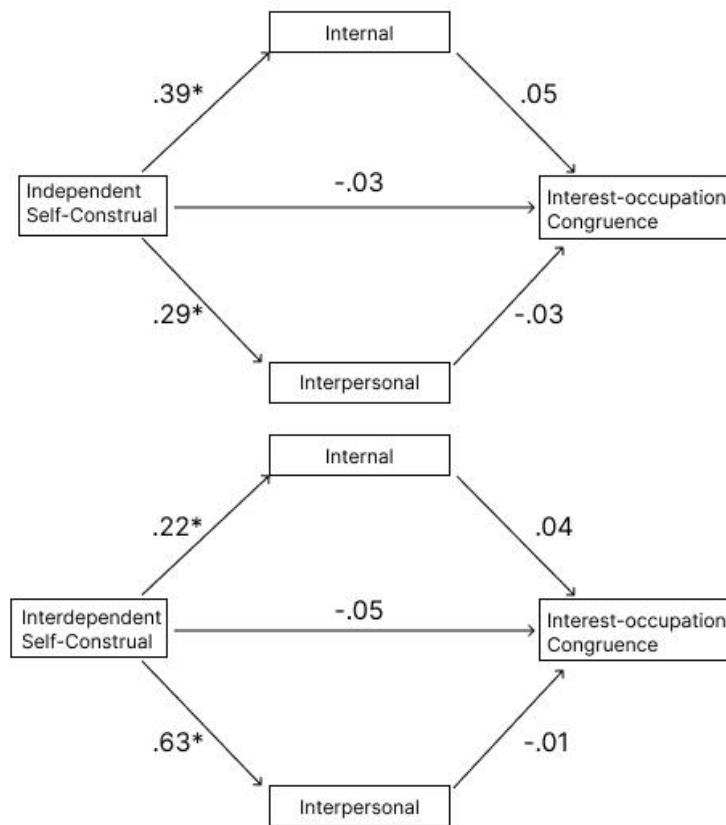
In the baseline model for independent self-construal, internal and interpersonal career motivations did not significantly mediate the associations between independent self-construal and interest-occupation congruence ($R^2 = .0065$, $p > .05$). Interest-occupation congruence was not significantly predicted by internal ($\beta = .05$, $t(389) = 1.07$, $p > .05$) or interpersonal career motivation ($\beta = -.03$, $t(389) = -1.21$, $p > .05$). Independent self-construal ($\beta = -.03$, $t(391) = -.97$, $p > .05$) did not have significant direct effect on interest-occupation congruence.

In the baseline model for interdependent self-construal, internal and interpersonal career motivations did not significantly mediate the association between interdependent self-construal and interest-occupation congruence ($R^2 = .0096$, $p > .05$). Interest-occupation congruence was not significantly predicted by internal ($\beta = .04$, $t(389) = .85$, $p > .05$) or interpersonal ($\beta = -.01$, $t(389) = -.37$, $p >$

.05) career motivation. There was no direct effect of interdependent self-construal ($\beta = -.05$, $t(389) = -1.47$, $p > .05$) on interest-occupation congruence (See Figure 5).

Figure 5

Baseline mediation models without external motivation as covariate

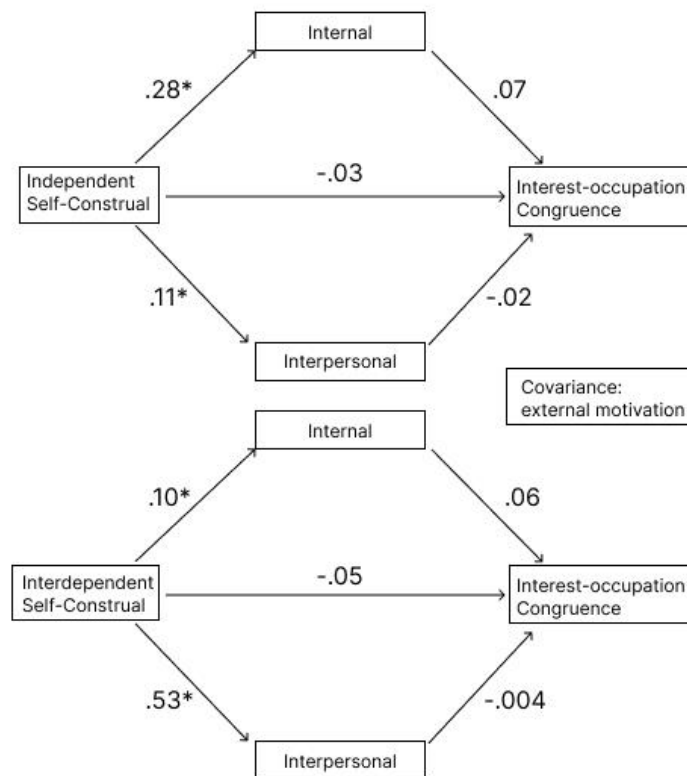


Notes. * $p < .05$

To explore these associations further, external career motivation was added as a covariate. The output indicated that there was no meaningful change compared to the results without external as covariate, neither independent ($R^2 = .0096$, $p > .05$) nor interdependent ($R^2 = .0127$, $p > .05$) career motivation significantly mediate the association between cultural self-construal and interest-occupation congruence (see Figure 6).

Figure 6

Baseline mediation models with external motivation as covariate



Notes. * $p < .05$

Additional analysis was conducted among participants who were unemployed and seeking jobs ($N = 60$). When considering the unemployed and job-seeking participants without covariance, career motivations did not significantly mediate interest congruence (independent: $R^2 = .108$, $p > .05$; interdependent: $R^2 = .098$, $p > .05$). In both models, self-construals had significant direct effects on interest congruence (independent: $\beta = -.16$, $t(56) = -2.28$, $p < .05$; interdependent: $\beta = -.16$, $t(56) = -2.12$, $p < .05$) (see Figure 7). In the model with external career motivation as a covariate, career motivations did not significantly mediate the association between cultural self-construals and career interest congruence either (independent: $R^2 = .147$, $p > .05$; interdependent: $R^2 = .125$, $p > .05$). In the model with external career motivation as a covariate, there was a significant direct effect between independent self-construal and career interest congruence ($\beta = -.16$, $t(55) = -2.23$, $p < .05$) (see Figure 8).

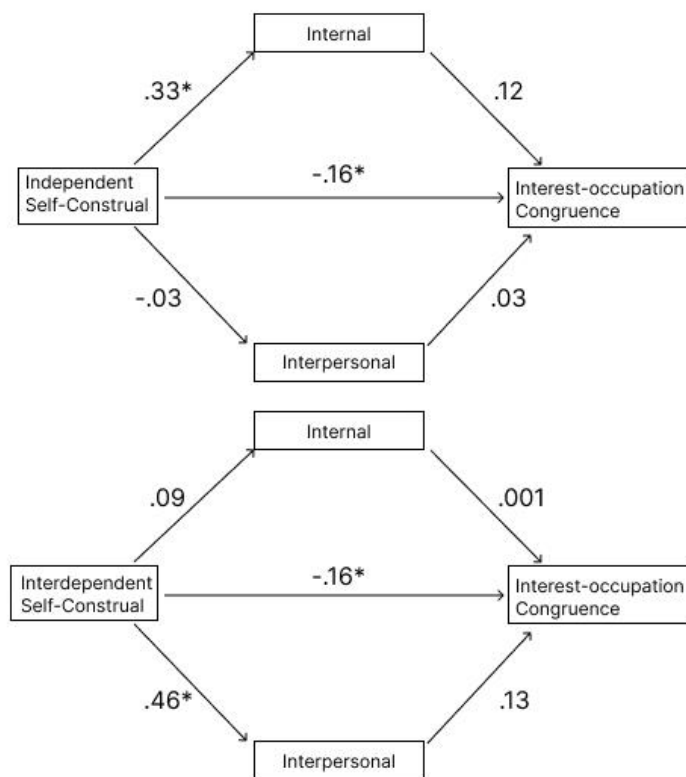
Exploratory Analyses

Further multiple regression analysis was conducted in the current study to explore associations with family career congruence. Family career congruence was significantly associated with cultural self-construals. Stronger family career congruence was related more strongly to interdependent self-construal ($\beta = .40$, $t(391) = 8.67$, $p < .05$) than independent self-construal ($\beta = .10$, $t(391) = 1.98$, $p < .05$).

.05). In the model with career motivations (internal, interpersonal, and external), family career congruence was also significantly associated with interdependent self-construal ($\beta = .40$, $t(390) = 8.42$, $p < .05$). Interdependent individuals were more likely to be motivated by interpersonal career motivation and family career congruence when making career-related decisions (See Figure 4).

Figure 7

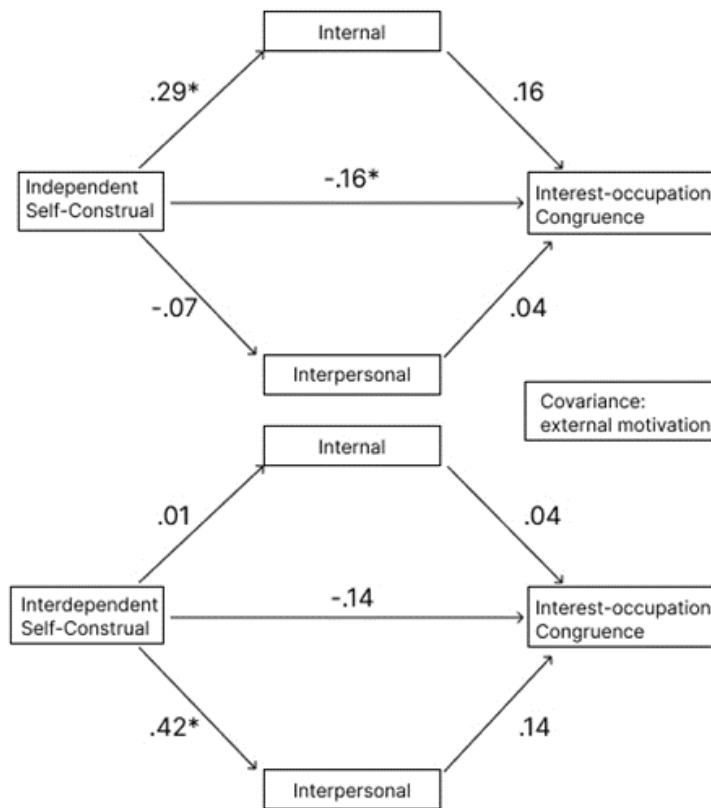
Mediation models without external motivation as covariate (unemployed participants)



Notes. * $p < .05$; $N = 60$

Figure 8

Mediation models with external motivation as covariate (unemployed participants)



Notes. * $p < .05$; $N = 60$

CHAPTER FOUR

DISCUSSION

The purpose of the current study was to test the associations between career motivations and cultural self-construals and explore whether career motivation was a significant mediator between self-construal and interest-occupation congruence. The results supported the association between career motivations and cultural self-construal but did not find mediating relationships between cultural self-construal and interest-occupation congruence.

Career Motivations and Cultural Self-Construal

The results supported H1 and H2, showing that career motivations are significantly related to cultural self-construal. The independent self-construal had the strongest association with internal career motivation. When making career decisions, individuals higher in independent self-construal are more likely to be motivated by internal factors such as their own interest, values, and so forth. This finding is consistent with study of O'Keefe et al. (2022), individuals who emphasized independent self-construal had stronger belief that passions played a positive role in pursuing careers, while individuals who emphasized interdependent self-construal tend to believe passions could be problematic in pursuing careers.

As predicted by H2, individuals higher in interdependent self-construal are more likely to be motivated by interpersonal factors such as the expectations of

others, role models and so forth. The outcome of interdependent self-construal supports prior studies (Kantamneni & Fouad, 2013; Savani et al., 2012).

Kantamneni and Fouad found that because of cultural preferences, South Asian American males prefer investigative occupations. And Savani et al. (2012) compared Americans (an individualistic culture) and Indians (a collectivistic culture) and found that compared to Americans, Indians were more likely to be affected by significant others when making decision, especially salient authority figures like fathers. The findings of the current study supported this prior cultural work, as individuals with higher interdependent self-construal made career choices more in congruence with their family's expectations. The result of family interest congruence provided additional evidence for H2 that interdependent self-construal individuals value more interpersonal factors.

Career Motivations as Mediators Between Self-Construal and Interest Congruence

However, the study found neither internal nor interpersonal career motivation to be a mediator between cultural self-construal and interest-occupation congruence. Adding external career motivations as control variable did not change these results. The outcome is consistent with some previous work (Kantamneni & Fouad, 2013) showing that interest-occupation congruence was not related to individuals' cultural differences. In contrast, a prior study (Gupta & Tracey, 2005) found that interest-occupation congruence differed in individualistic and collectivistic cultures; collectivistic individuals reported lower interest-

occupation congruence. The outcomes of the current study provided further support at the individual level that cultural self-construal was not associated with interest-congruence, as career motivations did not mediate the association between cultural self-construal and interest-occupation congruence. Considering that limited studies have been conducted to find associations between cultural self-construal and interest-occupation congruence, further studies are necessary to understand these relationships.

The factors that cause the study to fail to find career motivations mediated the association between cultural self-construal and interest-occupation congruence are ambiguous. One of the potential factors influencing the results could be the length of time a person is in the position, as their impression of an occupation and the real experience of being in that occupation could be different. For example, a person could have their impressions of being a doctor, but the person could find the impressions were different than real experiences when the person really becomes a doctor. The results of current study found that individuals had lower interest-occupation congruence when they stay longer in a position. The finding is consistent with a longitudinal study (Wille et al., 2014) which followed participants for their first 15 career years and found that interest-occupation congruence changes overtime, researchers found that interest-occupation congruence decreased when the participants stay longer in the position. When the current study limited the sample to participants in same

career path that were unemployed and job-seeking, interest-occupation congruence was significantly associated with cultural self-construals.

Limitations and Future Studies

Because time in the current position matters in interest-occupation congruence (Wille et al., 2014), the time participants had been in their current position is a potential limitation of this study. The range of time in current position in this study was large; participants were in current positions from less than one month to more than five years in the current study. Hence the time individuals are in their current positions could be a factor that influences the level of interest-occupation congruence.

Another initial factor that influenced the results could be that participants did not have significant differences in interest-occupation congruence whether they were or were not in ideal position. Generally, people who are in ideal position are expected to have higher interest-occupation congruence, but the study found individuals either in or not in ideal position were similar in interest-occupation congruence. This pattern could be the result of limited options for the question to measure whether the current position was their ideal position. In the current study, the participants were asked "*Is this your ideal job, or are you planning to pursue a different one?*" and had two options – "*Yes, this is my ideal position,*" or "*No, I am planning to pursue a different one.*" There could be another possibility that people were not in their ideal position, but they were not planning to pursue another one either. For example, dentist might not be an ideal

position for an individual, but they might not want to change jobs because the professional skills they have as dentist do not apply to their ideal position, or the high income as a dentist is more important to the individual at their present life stage. In this case, people might indicate being in their ideal position if they were not planning to pursue another one. Therefore, the fact that the current study did not show differences in interest-occupation congruence between people reported they were in or not in ideal position and might indicate inaccurate scores for interest-occupation congruence.

The external career motivations were not subdivided, which could be a limitation of the current study. A prior study (Wüst & Šimić, 2017) found people with different cultural backgrounds valued each external career motivation differently: German students (independent) valued job stability and salary more, while Croatian students (interdependent) valued job opportunities, social norms, and stimulating tasks. The current study categorized all these factors as external career motivations and found external career motivation was uniquely related to independent self-construal (but not interdependent self-construal) after accounting the other career motivations. Further studies can divide the external career motivations more specifically and explore whether the external career motivations are valued differently by individuals who emphasize interdependent self-construal in making career decisions.

Another notable finding is that the independent self-construal and interdependent self-construal in the current study are slightly correlated. This

relationship was expected because existing findings illustrated that independent and interdependent self-construal (or individualism and collectivism) are not bipolar opposites (Kam et al., 2012). There are different methods to measure independent and interdependent self-construal, further studies can consider replicate the method for measuring cultural self-construal; or use alternative methods such as the Schwarz Values Survey (Schwartz & Boehnke, 2004), which measures the independence and interdependence constructs in both individual and country levels. Another approach is to consider other factors influencing individuals' culture differences, such as biological factors. Studies have found vocational interests have some genetic bias (Harris et al., 2006; Schoormans et al., 2018). For example, people with shorter leukocyte telomere length had stronger association with Type D personality (Schoormans et al., 2018), people with D type personality more strongly enjoy positions that obtain power and authority, such as CEO, director, manager, and so forth (Alshehri et al., 2018; Disc D personality type, n.d). An earlier study (Kitayama et al., 2014) also found that people with specific genes express cultural differences differently; individuals who carried specific genes (7- or 2- repeat alleles) were more likely to show cultural differences, while individuals did not carry that gene did not show cultural differences. Future studies could consider genetic differences and explore whether people who do not show cultural differences have preferred self-construal in making career choices; and whether people with certain genes are more likely to have higher interest-occupation congruence.

Furthermore, more studies could extend the current study and look for cultural differences between interest congruences and job satisfaction. A previous study (Ng et al., 2009) found workers with independent cultural backgrounds reported higher job satisfaction, which could result from independent individuals having higher interest congruence. Nevertheless, Wu et al. (2018) found that individuals with higher interdependent self-construal had higher job commitment and were more likely to engage in work-unit oriented behaviors that benefit work efficiency. Researchers could look at individuals with different cultural self-construal and the association with job satisfaction and commitment, and the association of self-construal with job satisfaction and commitment. Furthermore, interest congruence is associated with career choice certainty, studies have found that people are more confident with their occupational plan when the occupations are more congruent to their interests (Ng et al., 2009; Tracy, 2010; Tracy & Darcy, 2002). However, there is limited research about how individuals' cultural differences affect career choice certainty. The role of culture self-construal on the prediction of career certainty is unclear and future studies could examine the role of culture between the relationship of interest congruence and career certainty.

Implications

The outcomes of the study are applicable to career counseling and may improve the ability to match people to the career with a better fit while considering their cultural differences. By learning that people with different

cultural backgrounds are motivated differently in work-related circumstances, counselors could understand their clients better, and provide more suitable guidance, for example, an interdependent self-construal individual might feel more supported by getting confirmation from family than from personal wishes. In the industry setting, understanding individual differences between self-construals could help organizations distribute resources more effectively, as Wu et al. (2018) indicated independent self-construal individuals had higher commitment in the job with high autonomy, while interdependent self-construal individuals had had higher commitment in jobs that required higher interdependence. Additionally, managers could better help employees grow by understanding that individuals with different cultural self-construal might react differently in same circumstances. As Su et al. (2023) found recently, in collectivistic cultural environments, employees with high family social capital had higher career progress, and those with higher culture-environment fit had better career outcomes. The outcomes of studying the cultural self-construal and career motivations could help organizations build an atmosphere that supports employee career goals. In education settings, further research could guide students to select a major and career goals that are compatible with their cultural self-construal and interests. Moreover, the results of the study could contribute to the field of culture and career decision making and improve understanding of career motivation as a mediator between cultural self-construal and interest congruence.

APPENDIX A
SELF-CONSTRUAL SCALE

Sources:

Kitayama, S., King, A., Yoon, C., Tompson, S., Huff, S., & Liberzon, I. (2014).

The Dopamine D4 Receptor Gene (DRD4) Moderates Cultural Difference
in Independent Versus Interdependent Social Orientation. *Psychological
Science*, 25(6), 1169–1177. <https://doi.org/10.1177/0956797614528338>

Singelis, T. M. (1994). The Measurement of Independent and Interdependent
Self-Construals. *Personality & Social Psychology Bulletin*, 20(5), 580–591.
<https://doi.org/10.1177/0146167294205014>

Answer Format

1 = strongly disagree;

2 = somewhat disagree;

3 = a little disagree;

4 = neither agree or disagree;

5 = a little agree;

6 = somewhat agree;

7 = strongly agree.

Scoring

The Independent Subscale items are Q1, Q2, Q5, Q7, Q9, Q10, Q13, Q15, Q18,
Q20, Q22, Q24, Q25, Q27, and Q29. The Interdependent Subscale items are
Q3, Q4, Q6, Q8, Q11, Q12, Q14, Q16, Q17, Q19, Q21, Q23, Q26, Q28, and
Q30.

To calculate subscale scores for each participant, take the average by adding respondents' answers to each subscale's items and dividing this sum by the number of items in the subscale (15).

Instructions:

This is a questionnaire that measures a variety of feelings and behaviors in various situations. Listed below are a number of statements. Read each one as if it referred to you. Circle the response that best matches your agreement or disagreement.

1. I enjoy being unique and different from others in many respects.
2. I can talk openly with a person who I meet for the first time, even when this person is much older than I am.
3. Even when I strongly disagree with group members, I avoid an argument.
4. I have respect for the authority figures with whom I interact.
5. I do my own thing, regardless of what others think.
6. I respect people who are modest about themselves.
7. I feel it is important for me to act as an independent person.
8. I will sacrifice my self interest for the benefit of the group I am in.
9. I'd rather say "No" directly, than risk being misunderstood.
10. Having a lively imagination is important to me.
11. I should take into consideration my parents' advice when making education/career plans.
12. I feel my fate is intertwined with the fate of those around me.

13. I prefer to be direct and forthright when dealing with people I've just met.
14. I feel good when I cooperate with others.
15. I am comfortable with being singled out for praise or rewards.
16. If my brother or sister fails, I feel responsible.
17. I often have the feeling that my relationships with others are more important than my own accomplishments.
18. Speaking up during a class (or a meeting) is not a problem for me.
19. I would offer my seat in a bus to my professor (or my boss).
20. I act the same way no matter who I am with.
21. My happiness depends on the happiness of those around me.
22. I value being in good health above everything.
23. I will stay in a group if they need me, even when I am not happy with the group.
24. I try to do what is best for me, regardless of how that might affect others.
25. Being able to take care of myself is a primary concern for me.
26. It is important to me to respect decisions made by the group.
27. My personal identity, independent of others, is very important to me.
28. It is important for me to maintain harmony within my group.
29. I act the same way at home that I do at school (or work).
30. I usually go along with what others want to do, even when I would rather do something different.

APPENDIX B
THREE-DIMENSIONAL INVENTORY

Sources:

Aycaň, & Fikret-Pasa, S. (2003). Career choices, job selection criteria, and leadership preferences in a transitional nation: the case of Turkey. *Journal of Career Development*, 30(2), 129–. <https://doi.org/10.1023/A:1026112127918>

The survey has 21 items in total. There are three subscales include internal (8 items), interpersonal (7 items), and external (6 items), the items are presented in a random order.

Answer Format

- 1 = not important at all;
- 2 = slightly important;
- 3 = moderately important;
- 4 = very important;
- 5 = extremely important.

Instructions:

The following statements are some factors that people consider when they make a career choice. Considering your situation, how important is each statement when you are making a career choice? Please evaluate the following statements from "not important at all" to "extremely important".

Internal Items

1. My personal values

2. Opportunity to contribute to society
3. Opportunity for learning and development
4. My personal wishes
5. Fit to the image that I have for myself
6. Challenging nature of the job
7. The life style that comes with the job
8. My skills and abilities

Interpersonal Items

9. My father's expectations of me
10. My mother's expectations of me
11. My relatives' expectations of me
12. My teachers' expectations of me
13. My friends' career choices
14. The role models
15. My best friends' expectations of me

External Items

16. Opportunity to achieve a good standard of living
17. Opportunity to earn a good salary
18. Status in society
19. Ease in career advancement
20. Availability of jobs
21. Market gaps and opportunities

APPENDIX C

O*NET INTEREST PROFILER SHORT FORM (RIASEC)

Sources:

Holland, J. L. (1997). *Making vocational choices: a theory of vocational personalities and work environments* (3rd ed.). Psychological Assessment Resources.

National Center for O*NET Development. Interest Profiler (IP). *O*NET Resource Center*. Retrieved March 27, 2024, from <https://www.onetcenter.org/IP.html>

Total number of items: 60. There are 6 subscales (realistic, investigative, artistic, social, enterprising, and conventional), 10 items for each subscale.

Answer Format

1= strongly dislike;

2 = dislike;

3 = unsure;

4 = like;

5 = strongly like.

Instructions:

Listed below are a number of work activities that some people do on their jobs.

Read each question carefully and decide how you would feel about doing each type of work.

Try not to think about:

- If you have enough education or training to do the work; or

- How much money you would make doing the work.

Just think about if you would like or dislike doing the work.

Realistic items

1. Build kitchen cabinets
2. Lay brick or tile
3. Repair household appliances
4. Raise fish in a fish hatchery
5. Assemble electronic parts
6. Drive a truck to deliver packages to offices and homes
7. Test the quality of parts before shipment
8. Repair and install locks
9. Set up and operate machines to make products
10. Put out forest fires

Investigative items

11. Develop a new medicine
12. Study ways to reduce water pollution
13. Conduct chemical experiments
14. Study the movement of planets
15. Examine blood samples using a microscope
16. Investigate the cause of a fire
17. Develop a way to better predict the weather
18. Work in a biology lab

- 19. Invent a replacement for sugar
- 20. Do laboratory tests to identify diseases

Artistic items

- 21. Write books or plays
- 22. Play a musical instrument
- 23. Compose or arrange music
- 24. Draw pictures
- 25. Create special effects for movies
- 26. Paint sets for plays
- 27. Write scripts for movies or television shows
- 28. Perform jazz or tap dance
- 29. Sing in a band
- 30. Edit movies

Social items

- 31. Teach an individual an exercise routine
- 32. Help people with personal or emotional problems
- 33. Give career guidance to people
- 34. Perform rehabilitation therapy
- 35. Do volunteer work at a non-profit organization
- 36. Teach children how to play sports
- 37. Teach sign language to people with hearing disabilities
- 38. Help conduct a group therapy session

39. Take care of children at a day-care center

40. Teach a high-school class

Enterprising items

41. Buy and sell stocks and bonds

42. Manage a retail store

43. Operate a beauty salon or barber shop

44. Manage a department within a large company

45. Start your own business

46. Negotiate business contracts

47. Represent a client in a lawsuit

48. Market a new line of clothing

49. Sell merchandise at a department store

50. Manage a clothing store

Conventional items

51. Develop a spreadsheet using computer software

52. Proofread records or forms

53. Load computer software into a large computer network

54. Operate a calculator

55. Keep shipping and receiving records

56. Calculate the wages of employees

57. Inventory supplies using a hand-held computer

58. Record rent payments

59. Keep inventory records

60. Stamp, sort, and distribute mail for an organization

APPENDIX D

ADOLESCENT-PARENT CAREER CONGRUENCE SCALE

Supplementary Congruence Subscale

Sources:

Sawitri, D. R., Creed, P. A., & Zimmer-Gembeck, M. J. (2013). Adolescent–parent career congruence scale. PsycTESTS Dataset.

<https://doi.org/10.1037/t25195-000>

Total numbers of items: 5.

Answer Format

- 1= strongly disagree;
- 2 = somewhat disagree;
- 3 = neither agree nor disagree;
- 4 = somewhat agree;
- 5 = strongly agree.

Instructions:

The statements below are perceptions of your family regards your career interests, values, plans, and goals. Please choose the response that best matches your agreement or disagreement.

1. My family wants the same career for me as I want for myself.
2. My family and I have similar career interests.
3. The career plans I have for myself are similar to the plans that my family has for me.

4. I am interested in the career areas that my family expects me to enter.
5. My family and I have the same way of defining career success.

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