

Moderating Effect of Perceived Career-related Peer Support on the Relationship between Helicopter Parenting and Career Decision-making Self-efficacy

Nicholas K. X. Teh¹

¹Department of Psychology, Faculty of Behavioural Sciences, HELP University, Kuala Lumpur, Malaysia

Abstract: The aim of this study is to investigate the moderating effect of perceived career-related peer support (PCRPS) on the relationship between helicopter parenting and career decision-making self-efficacy (CDMSE). The current study had a non-experimental correlational research design conducted through an online survey. Seventy-two students in tertiary education from various disciplines were recruited for this study. Scales were administered via an online survey to measure helicopter parenting, PCRPS and CDMSE. Results revealed no significant relationship between helicopter parenting and CDMSE, and PCRPS did not moderate this relationship, which contradicted both hypotheses of this study. However, patterns with working experience were revealed. Findings could indicate that social relationships may not have a strong direct impact on CDMSE, as compared to working experience.

Keywords: helicopter parenting, perceived career-related peer support, career decision-making self-efficacy

INTRODUCTION, CONTEXT, AND RESEARCH OBJECTIVE(S)

Career indecision is becoming a global issue that negatively impacts students, which may result in dropping out of education or unemployment (Fernandes & Bance, 2015). Statistics suggest that there has been an increasing trend of students being indecisive about their preferred major of study (Kelly & Shin, 2008), with an average of 20 – 33% of student dropouts in the United States (National Centre for Education Statistics, 2005) and around 50% of Malaysian students facing career-related difficulties (Talib & Aun, 2009). While the development of career guidance activities by counsellors has been shown to be successful in overcoming career indecision (Krass & Hughey, 1999), interventions can begin as early as childhood with parents playing a significant role (Fernandes & Bance, 2015). Further research in this area could lead people to more satisfactory career pathways, better mental preparation for the working world (Yang & Gysbers, 2007) and overall life satisfaction (Robertson & Eschenauer, 2020).

LITERATURE REVIEW/THEORETICAL FRAMEWORK

Career Decision-making Self-efficacy (CDMSE)

CDMSE is defined as an individual belief that one can succeed in completing actions needed to make a clear decision in career-related matters (Betz et al., 1996). An expanded concept of self-efficacy by Bandura (1986) takes on a social-cognitive perspective, proposing that individuals are agents of their livelihood. Research on CDMSE is often associated with development in young adults, such as confidence in skills (Paulsen & Betz, 2004), persistence against stress (Sandler, 2000), self-identity (Kim & Yang, 2019), and emotional intelligence (Akhtar et al., 2014). Moreover, social relationships, such as those with parents and peers, and the comparison between parents and peers (Kracke, 2002; Nawaz & Gilani, 2011; Xing & Rojewski, 2018; Zhang & Huang, 2018) were common variables to potentially correlate with CDMSE. Across the stages of life, parents and peers act as a network of connections to facilitate psychological and social transitions from childhood to young adulthood, which poses importance in significant life events, such as career development and progression (Nawaz & Gilani, 2011).

In collectivist cultures such as the Chinese, individuals are encouraged to meet expectations and obligations set by their families as a form of filial piety, especially in career-related matters that can enhance the family's social status (Xing & Rojewski, 2018). Parents of this nature tend to provide the support their children need, and these children are likely to perceive their actions as parental support, directly impacting their CDMSE, which can be stronger than other contextual factors such as peer influence (Wright et al., 2014). Findings also revealed that family imposes a strong influence on students' CDMSE, especially when they come from a lower socioeconomic background (Xing & Rojewski, 2018). These students may wish to repay their parents by raising their family to a higher socioeconomic status, prioritizing this over their own needs from their career. This indicates that family influence has a strong impact on CDMSE (Xing & Rojewski, 2018; Wang et al., 2022).

Additionally, research conducted in Pakistan, another collectivistic society, unveiled that parent and peer influences have significant positive relationships with CDMSE, however, the influence from parents was stronger than peers, regardless of gender differences in students (Nawaz & Gilani, 2011). Other studies argue that peer influence should be stronger, with the reasoning that peer support is more pertinent to decision-making because, without a generational gap, experiences and expectations are more similar; this seems to be consistent across both collectivistic and individualistic cultures (Childers & Rao, 1992; Kracke, 2002; Patel et al., 2008). This contrasts with the culture of filial piety, indicating that parents from collectivistic societies have more influence than peers (Xing & Rojewski, 2018). Therefore, while social relationships significantly predict CDMSE, the strength of influence between parents and peers on CDMSE remains unclear, given that in collectivist cultures where others' opinions tend to hold more weight (Triandis, 2004).

Helicopter Parenting: Effects on Career Decision-making Self-efficacy

Helicopter parenting is defined as the increased frequency of over-involvement and over-protection for one's children, limiting their development for independence and autonomy (Kwon et al., 2017). When parents become too involved with their children's development, it may be problematic for the child's mental health and well-being (Kouros et al., 2016). There are contradictory findings on the impact of helicopter parenting on children, whereby helicopter parents were either a reliable source to determine one's career pathway (Simmons, 2008; Lee & Kang, 2018; Gomes & Deuling, 2019) or have negative effects on emerging adults with impact on their emotional development, academic functioning, and decision-making (Luebbe et al., 2016).

For instance, high levels of helicopter parenting have been found to have positive indirect effects on anxiety and depression, while autonomy supportive parenting had positive indirect effects on life satisfaction and physical health (Reed et al., 2016). Another study suggested that it is not the act of helicopter parenting, but the child's perception of helicopter parenting that negatively correlated with emotional functioning, decision-making, and academic functioning (Luebbe et al., 2016). Their results suggest that gaining parental support in seeking information can elevate children's decision-making ability and improve academic functioning when the perception of helicopter parenting behaviors is low. These studies not only support the notion that a greater perception of helicopter parenting may lead to decreased CDMSE but also that when parental support is not perceived as helicopter parenting, it instead provides positive development opportunities in self-efficacy and career decision-making. In contrast, helicopter parenting could also lead to better psychological adjustment when the parent-child affection is strong (Lee & Kang, 2018). Depending on how the act is perceived (whether beneficial or harmful to one's career development), helicopter parenting can have positive and negative impacts on children. Based on the Social Comparison Theory (Festinger, 1954), children could make comparisons of parents among peers as a reference to the level of helicopter parenting that is displayed in their parents. It is likely that the perception of helicopter parenting could change based on indirect access and evaluation from interactions with peers. Overall, it is anticipated that helicopter parenting has a negative relationship with CDMSE (Hypothesis 1).

Moderating Role of Perceived Career-related Peer Support

Career-related peer support (CRPS) can be defined as having peers as a source of information, suggestions, and emotional support regarding career-related matters (Zhang & Huang, 2018). CRPS was found to be positively correlated with exploratory behaviors for one's career and commitment to career choices, especially when the relationship with peers is positive and intimate (Felsman & Blustein, 1999; Kracke, 2002). The Social Cognitive Career Theory (SCCT) describes that an individual's CDMSE is a process that is influenced by multiple factors, such as personal variables, contextual variables, and experiential variables (Segal et al., 2002). Young adults seeking to pursue their careers and make career-related decisions may be influenced by friends and family, which are contextual variables (Sarwar & Azmat, 2013). Although friends and family can be perceived as sources of support to build one's self-efficacy in making decisions (Nawaz & Gilani, 2011), helicopter parenting has shown to provide impairments to one's self-efficacy to make crucial decisions (Reed et al., 2016; Lee & Kang, 2018). This may result in CRPS being perceived as a more reliable source for obtaining career-related information, leading to better career decision-making (Childers & Rao, 1992; Kracke, 2002; Patel et al., 2008; Perez & Gati, 2017). It is possible that when individuals perceive high CRPS, it reduces the negative influence on one's self-efficacy received from parental guidance.

Some studies have shared that peer support may have stronger influences on career exploration than parental support. It was found that peers can directly support career exploration, or indirectly via emotional support, in accordance with the SCCT (Zhang & Huang, 2018). Moreover, students with a lack of peer support predicted poorer college adjustment and lower GPA while parental support had no correlations with academic success after controlling for self-motivation and peer support (Dennis et al., 2005), suggesting this pattern could be similar in the career exploration scene. While both peer and parental support can increase career self-efficacy, there was a greater association with peer support at high levels of perceived social support and a greater association with parental support at average and low levels of perceived social support (Jemini-Gashi et al., 2019). Furthermore, peer support was found to be a moderator of career outcomes, whereas parental support was not (Kvasková et al., 2022; Wang

& Fu, 2015). This suggests that peer support tends to be the central pillar of social support, which supports the notion that CRPS could moderate the relationship between helicopter parenting and CDMSE (Hypothesis 2).

CRPS can manifest as mentoring, which can lead to positive career planning, career outcome and professional commitment regardless of industrial differences (Ross et al., 1989; Himle et al., 1989; Jacobs et al., 2003; Pethrick et al., 2017). Meanwhile, helicopter parenting was associated with maladaptive behaviors in children, such as self-entitlement (Bradley-Geist & Olson-Buchanan, 2014). Insufficient CRPS may not be effective in addressing the maladaptive behaviors derived from helicopter parenting as the supporting peer may be expected to resolve their career-related problems. In a similar vein, maintaining peer networks during the school-to-work transition can increase self-efficacy, especially when peers are in similar career facets (Ruschoff et al., 2018), supporting the SCCT that PCRPS encourages self-regulatory behaviors for personal success (Sameroff, 2010; Lent & Brown, 2013). Therefore, it can be suggested that the negative relationship between helicopter parenting and CDMSE will be strongest when PCRPS is low and weakest when PCRPS is high (Hypothesis 2a & 2b).

Research Gap

Past research findings were limited to their generality (Di Fabio & Kenny, 2014) and contradicting mixed effects of parental influence on self-efficacy (Luebbe et al., 2016; Reed et al., 2018; Zhong et al., 2020). Investigation in this area with a specific context (career) could address this gap by looking into helicopter parenting and PCRPS as separate predictors of CDMSE, rather than general social support. Additionally, previous studies were limited to utilizing social psychology approaches to understand CDMSE (Reed et al., 2018; Ruschoff et al., 2018; Zhong et al., 2020), wherein taking a cognitive lens (perception of helicopter parenting and PCRPS) could overcome this gap. This ensures CDMSE outcomes are differentiated between parents and peers, rather than other forms of general social support, such as emotional support or financial aid. Lastly, samples from earlier studies were too young or already working (Gomes & Deuling, 2019; Patel et al., 2008), which may not capture the need for support during the life transition phase from studies to work. This gap can be addressed by recruiting students in tertiary education (career exploration phase) from various courses to ensure generalizability. The work experience of participants should be recorded as studies mentioned that it could be a limitation (Perez & Gati, 2017; Zhang & Huang, 2018).

METHOD

Participants

A G-power analysis with a .15 effect size, .05 alpha, and .80 power revealed that a minimum sample size of 55 participants is required for this study. Seventy-two participants with an average age of 20.86 years ($SD = 0.79$; 49 females) undergoing tertiary education courses from Malaysia were recruited for this study ($N = 72$) through purposive and snowball sampling to ensure a diverse sample in race and socio-economic backgrounds. Participants were recruited from various courses such as psychology (41.67%), business (18.06%), natural sciences (16.67%), education (6.94%), and others including law, engineering, computer sciences, art, communications, and interior design (16.67%). Additionally, 50% of participants had internship experience, 45.83% lacked internship experience, and 4.17% were currently in an internship.

Materials

A demographic questionnaire asked participants for their gender, age, nature of tertiary education course, current year of study, and presence of internship experience. The Helicopter Parenting Scale (HPSS) (LeMoyne & Buchanan, 2011) is a self-report scale that measures the perception of helicopter parenting (seven items, 5-point Likert scale from *strongly disagree* to *strongly agree*) that is reliable across various studies (LeMoyne & Buchanan, 2011; Schiffrin et al., 2019). Next, the Career Decision Self-Efficacy Scale – Short Form (CDSS-SF) (Betz et al., 1996) is a reliable ($\alpha = .94$) self-report scale that measures an individual's self-efficacy when making career-related decisions (25 items, 5-point Likert scale from *no confidence at all* to *complete confidence*). Lastly, the Career-Related Peer

Support Scale (CPSS) (Zhang & Huang, 2018) is a reliable ($\alpha = .89$) self-report scale that measures the perception of one's career-related peer support (15 items, 5-point Likert scale from *no confidence at all* to *complete confidence*). All scales were ranged from 1-5 and used without modification.

Procedure

An online survey was open to the public on online social media platforms, with the survey lasting no longer than 15 minutes. When participants clicked on the survey link, they were presented with an informed consent form that required voluntary agreement to participate in the study. Next, participants were given a demographic questionnaire to be completed, followed by the three scales used in this study, HPSS, CDSS-SF, and CPSS, presented in that order. After completion, a message was displayed at the end of the online survey to allow snowball sampling.

RESULTS

Descriptive Statistics and Supplementary Analysis

Table 1

Mean Scores between Gender, Internship Experience, Career Decision Self-Efficacy Scale – Short Form, and Career-Related Peer Support Scale

Gender	Internship Experience	n	CDMSE		PCRPS	
			<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Male	Yes	8	77.13	11.17	53.13	11.05
	No	12	86.75	17.34	52.25	9.45
Female	Yes	28	88.96	12.79	57.18	7.87
	No	21	90.76	14.79	57.38	6.92

Table 2

Correlations with confidence intervals

Variable	1	2	3	4
1. Gender				
2. Internship Experience	-.29*			
3. Helicopter Parenting	.01	.04		
4. Career Decision-making Self-efficacy	.20	.09	.06	
5. Perceived Career-related Peer Support	.24*	-.05	.13	.37**

* indicates $p < .05$. ** indicates $p < .01$.

On average, participants with internship experience have a lower CDMSE (Males: $M = 77.13$, $SD = 11.17$; Females: $M = 88.96$, $SD = 12.79$) than those without internship experience for both males ($M = 86.75$, $SD = 17.34$) and females ($M = 90.76$, $SD = 14.79$). Male participants with internship experience, on average, have a higher perceived career-related peer support ($M = 53.13$, $SD = 11.05$) compared to those without internship experience ($M = 52.25$, $SD = 9.45$). In contrast, female participants with internship experience have, on average, a lower perceived career-related peer support ($M = 57.18$, $SD = 7.87$) compared to those without internship experience ($M = 57.38$, $SD = 6.92$).

There is a weak negative correlation between gender and internship experience ($r = -.29$, $p = .015$) and a weak positive correlation between gender and PCRPS ($r = .24$, $p = .036$). There is also a moderate correlation between CDMSE and PCRPS ($r = .37$, $p = .001$).

Assumption Tests

The assumption of normality was met as the histogram shows a normal distribution of residuals and the normal probability plot of regression standardized residuals also showed that the residuals follow along a straightline (See Appendix A). Heteroscedasticity and linearity observed on the scatterplot indicate that there is no issue in heteroscedasticities (See Appendix B). There is no multicollinearity as the variance inflation factor (VIF) was 1.02 for both helicopter parenting and PCRPS, while tolerance was .98 for both helicopter parenting and PCRPS.

Inferential Analysis

Process Macro model 1 was conducted for inferential analysis. The overall model containing helicopter parenting, CDMSE, PCRPS, and the interaction term between helicopter parenting and PCRPS significantly predicted CDMSE, explaining 16.3% of its variance, $R^2 = .16$, $F(3, 68) = 3.53$, $p = .019$.

Helicopter parenting did not significantly predict CDMSE, after controlling for PCRPS and the interaction term between helicopter parenting and PCRPS, $b = 21.32$, $t(68) = .91$, $p = .368$. This result illustrates that hypothesis 1: A higher level of helicopter parenting will significantly predict lower career decision-making self-efficacy, was not supported. Besides that, PCRPS also did not significantly predict CDMSE, after controlling for helicopter parenting and the interaction term between helicopter parenting and PCRPS, $b = 1.09$, $t(68) = 1.49$, $p = .142$.

Furthermore, there was no significant interaction between helicopter parenting and PCRPS to predict CDMSE, when controlling for helicopter parenting and PCRPS, $b = 0.39$, $t(68) = -.88$, $p = .385$, revealing that PCRPS did not moderate the relationship between helicopter parenting and CDMSE. This result indicates that hypothesis 2: Perceived career-related peer support will moderate the relationship between helicopter parenting and career decision-making, was not supported.

DISCUSSION

The contradictory results to hypothesis 1 are inconsistent with studies that suggest a correlation between helicopter parenting and CDMSE (Gomes & Deuling, 2019; Lee & Kang, 2018; Luebbe et al., 2016; Reed et al., 2018; Simmons, 2008). It is possible that helicopter parenting does not influence CDMSE if participants do not perceive the loss of autonomy as a bane to their career exploration. This may illustrate a case of authority heuristic (Cummings, 2014), whereby participants believe and trust the opinion of their parental authority in career-related matters, regardless of the parents' current position in the working environment. The filial piety (a form of respect shown by listening to one's parent's opinions) perspective (Xing & Rojewski, 2018) may be applied where, even though the sampling was derived from different races and socio-economic backgrounds, career-related filial piety may be present across cultures.

Additionally, results also showed that PCRPS did not significantly predict CDMSE, which contradicts studies that exhibited the positive effects of peer support on CDMSE (Dennis et al., 2005; Perez & Gati, 2017). However, supplementary analysis showed a moderate positive correlation between PCRPS and CDMSE, which, in contrast, supports the aforementioned studies. A potential explanation for mixed results is that PCRPS had insufficient positive value to be a predictor for participants' CDMSE (Ruschoffs et al., 2018), and other variables in the SCCT could hold more weight for participants, such as personal interests and goals. This may illustrate different career decision-making styles (Gati et al., 2010), whereby Gen Z participants may adopt a liberal thinking style that emphasizes being open-minded to opinions and freedom of choice (Situmorang & Salim, 2021). Hence, it is

possible that while participants value peer support for career exploration, it may not be a source of information that provides confidence for one to make career-related decisions.

Next, the results for hypothesis 2 contradict studies that mentioned the impact strength of PCRPS (Dennis et al., 2005; Ruschoff et al., 2018; Zhang & Huang, 2018). However, the overall model and the interaction term between helicopter parenting and PCRPS did not significantly predict CDMSE, which is consistent with the SCCT, describing that CDMSE would be influenced by contextual variables (Segal et al., 2002). It may be that the HPSS did not take career-related context into account, which led to a mismatch of self-efficacy perception, as CDSS-SF does not measure general decision-making self-efficacy. This is consistent with studies that showed the negative effects of helicopter parenting on self-efficacy and decision-making (Luebbe et al., 2016; Reed et al., 2018), but ambiguous effects in career-related context (Simmons, 2008; Lee & Kang, 2018; Gomes & Deuling, 2019). Thus, PCRPS could not moderate the relationships between helicopter parenting and CDMSE may be due to the context behind helicopter parenting and CDMSE not being similar.

According to the SCCT (Segal et al., 2002), personal variables may possess a greater salience on influence in comparison to other variables, as it is the primary predictor of contextual impacts. The lack of moderating effects can be explained by the Social Learning Theory (Kyle & Bandura, 1978), whereby individuals vicariously learn techniques to tackle career-related matters from their peers. However, this may lead to upward social comparison (Festinger, 1954), when the individual attempts to learn from peers who are perceived to be highly successful in their careers. This could negatively impact the personal variables that predict CDMSE, such as career satisfaction (Eddleston, 2009), self-concept (Burleson et al., 2005) and depression (Li, 2018). Although peers may provide career-related support, the negative comparison could decrease one's CDMSE due to the elicitation of self-defeating mindsets (McInnes & Chen, 2011). Therefore, individual attitudes on their career pathways may hold greater significance in predicting CDMSE than PCRPS.

Through the lens of cognitive psychology, the Multiattribute Utility Theory (MAUT) (Sarin, 2013) suggests that decision-making is derived from multiple sources rather than weighing onto one. Although individually subjective, it may be perceived that support from social relationships is insufficient to provide the needed utility to make career-related decisions, whereby PCRPS does not hold high levels of utility to the extent that it could overshadow other sources of utility (i.e., helicopter parenting). There is a likelihood that participants (Generation Z), do not weigh social support with greater utility as other generations (Barford & Hester, 2011), as they were found to be more independent in upholding their responsibilities and pursuing personal aspirations, rather than staying loyal to an organization (Chillakuri & Mahanandia, 2018). Hence, the inadequate perceived utility of PCRPS may not moderate the relationship between helicopter parenting and CDMSE.

Additionally, descriptive statistics and supplementary analysis revealed a pattern that male participants with internship experience have greater PCRPS compared to those who do not and vice versa for female participants. This indicates that males may value career-related support more than females such as instrumental support (e.g., greater job positions and higher salary), while females prefer psychological support (Frey & Rothlisberger, 1996). Lastly, female participants, on average, have higher levels of PCRPS compared to male participants, which could illustrate that females tend to report a greater perception of social support compared to males (Rueger et al., 2008) even in the workplace (Cahill & Sias, 1997). Second-generation gender bias can explain these differences, whereby males are viewed as more career-oriented than females (Swartz & Amatucci, 2018). Therefore, research on PCRPS should put more emphasis on gender differences in support availability perception (Rueger et al., 2008). It is to be noted that the descriptive analysis was derived from an uneven gender ratio sample, the results of which should be interpreted with caution.

Limitations and Future Recommendations

A limitation of this study is the lack of control over the participants' surrounding environment as it is conducted via an online survey, which may be subjected to the influence of peer pressure or parental pressure. Future studies could consider conducting the study in a private setting, and have associated participants not be in the same room. Another limitation is that the findings of helicopter parenting remain ambiguous since there was no significant correlation with CDMSE in this study. Researchers could better define helicopter parenting in a career-related context (e.g., taking control of

a child's career prospects) rather than a general context, or examine other parenting styles that can impact CDMSE.

PRACTICAL SUGGESTIONS

Based on previous findings that suggest the negative impacts of helicopter parenting and the current study that shows there are no correlations between helicopter parenting and CDMSE, students could decide whether to collaborate with their parents on their career journey. Parents can foster the career development of their child (Ginevra et al., 2015) but young adults should be mindful not to hand over too much control to their parents as it could still impact their general self-efficacy (Luebbe et al., 2016). Similarly, as PCRPS may play a role, universities could facilitate students' career development through peer mentorship programs, in which the support of senior facilitators has been found to promote career networking and early career advancement for junior students (Fleming et al., 2015). Besides that, given that current findings do not show correlations between either helicopter parenting or PCRPS on CDMSE, students could find other means to improve CDMSE. Both therapeutic counselling and career counselling were found to be helpful in developing one's core belief towards work life and building the individual journey to meet career goals (Westergaard, 2012). For instance, using anecdotal experiences of working with others as a narrative during the counselling process can build one's CDMSE and positive reflection on their career journey (Charokopaki, 2019). Overall, these suggestions describe that appropriate collaboration with parents or peers and a therapeutic reflective journey could reduce career indecision and improve CDMSE.

ACKNOWLEDGEMENTS AND FUNDING

The study was funded by the HELP University Internal Research Grant Scheme (IRGS), grant no. 20-05-020. The authors thank the anonymous reviewers for comments on the initial submission of this manuscript.

STATEMENT OF ETHICAL CLEARANCE

The study was cleared for data collection by the Ethics Review Board (ERB), Department of Psychology, HELP University. Ethical clearance granted 2nd August 2020.

DATA AVAILABILITY STATEMENT

Data is available upon request from the author.

DECLARATION OF ORIGINALITY

I declare that the current submission is my work and is not being considered for publication elsewhere. I certify that referenced work used in this submission has been properly acknowledged in text and in the reference list.

REFERENCES

- Akhtar, N., Sajjad, N., & Khattak, S. R. (2014). Impact of emotional intelligence on career decision making self efficacy among students of Pakistani universities. *NUML Journal of Management & Technology*, 9(1), 34-47.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Barford, I. N., & Hester, P. T. (2011). Analysis of generation Y workforce motivation using Multiattribute Utility Theory. *Defense AR Journal*, 18(1), 63-80.
- Betz, N. E., Klein, K. L., & Taylor, K. M. (1996). Evaluation of a short form of the career decision-making self-efficacy scale. *Journal of Career Assessment*, 4(1), 47-57. <https://doi.org/10.1177/106907279600400103>
- Bradley-Geist, J. C., & B. Olson-Buchanan, J. (2014). Helicopter parents: An examination of the correlates of over-parenting of college students. *Education + Training*, 56(4), 314-328. <https://doi.org/10.1108/et-10-2012-0096>
- Bright, J. E., Pryor, R. G., Chan, E. W., & Rijanto, J. (2009). Chance events in career development: Influence, control and multiplicity. *Journal of Vocational Behavior*, 75(1), 14-25. <https://doi.org/10.1016/j.jvb.2009.02.007>
- Burleson, K., Leach, C. W., & Harrington, D. M. (2005). Upward social comparison and self-concept: Inspiration and inferiority among art students in an advanced programme. *British Journal of Social Psychology*, 44(1), 109-123. <https://doi.org/10.1348/014466604x23509>
- Cahill, D. J., & Sias, P. M. (1997). The perceived social costs and importance of seeking emotional support in the workplace: Gender differences and similarities. *Communication Research Reports*, 14(2), 231-240. <https://doi.org/10.1080/08824099709388665>
- Charokopaki, K. A. (2019). Working on stories to enhance career decision making self-efficacy. *International Journal of Psychological Studies*, 11(3), 63. <https://doi.org/10.5539/ijps.v11n3p63>
- Childers, T. L., & Rao, A. R. (1992). The influence of familial and peer-based reference groups on consumer decisions. *Journal of Consumer Research*, 19(2), 198. <https://doi.org/10.1086/209296>
- Chillakuri, B., & Mahanandia, R. (2018). Generation Z entering the workforce: the need for sustainable strategies in maximizing their talent. *Human Resource Management International Digest*, 26(4), 34–38. <https://doi.org/10.1108/hrmid-01-2018-0006>
- Cummings, L. (2014). The “trust” heuristic: Arguments from authority in public health. *Health Communication*, 29(10), 1043–1056. <https://doi.org/10.1080/10410236.2013.831685>
- Dennis, J. M., Phinney, J. S., & Chuateco, L. I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development*, 46(3), 223–236. <https://doi.org/10.1353/csd.2005.0023>
- Di Fabio, A., & Kenny, M. E. (2014). The contributions of emotional intelligence and social support for adaptive career progress among Italian youth. *Journal of Career Development*, 42(1), 48–59. <https://doi.org/10.1177/0894845314533420>
- Eddleston, K. A. (2009). The effects of social comparisons on managerial career satisfaction and turnover intentions. *Career Development International*, 14(1), 87-110. <https://doi.org/10.1108/13620430910933592>
- Felsman, D. E., & Blustein, D. L. (1999). The role of peer relatedness in late adolescent career development. *Journal of Vocational Behavior*, 54(2), 279-295. <https://doi.org/10.1006/jvbe.1998.1664>
- Fernandes, R., & Bance, L. O. (2015). Impact of career thoughts, parental support and career decision-making self-efficacy on adolescents' career indecision: Basis for career guidance program. *International Journal of Education and Management Studies*, 5(2), 101-107.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140. <https://doi.org/10.1177/001872675400700202>

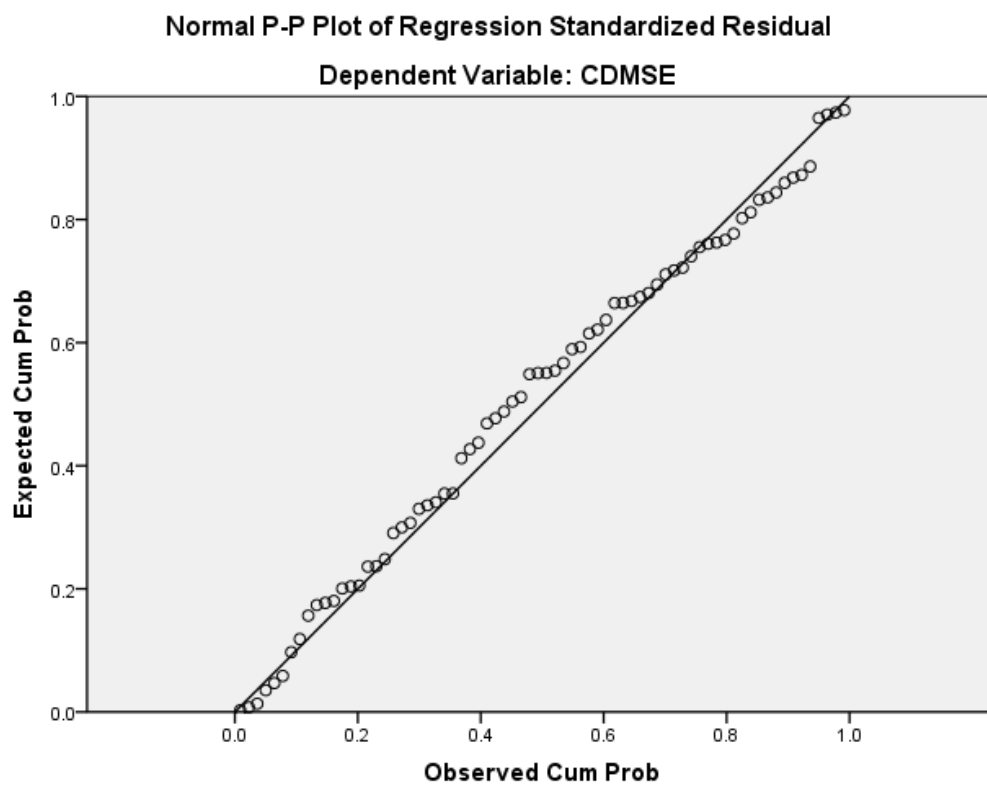
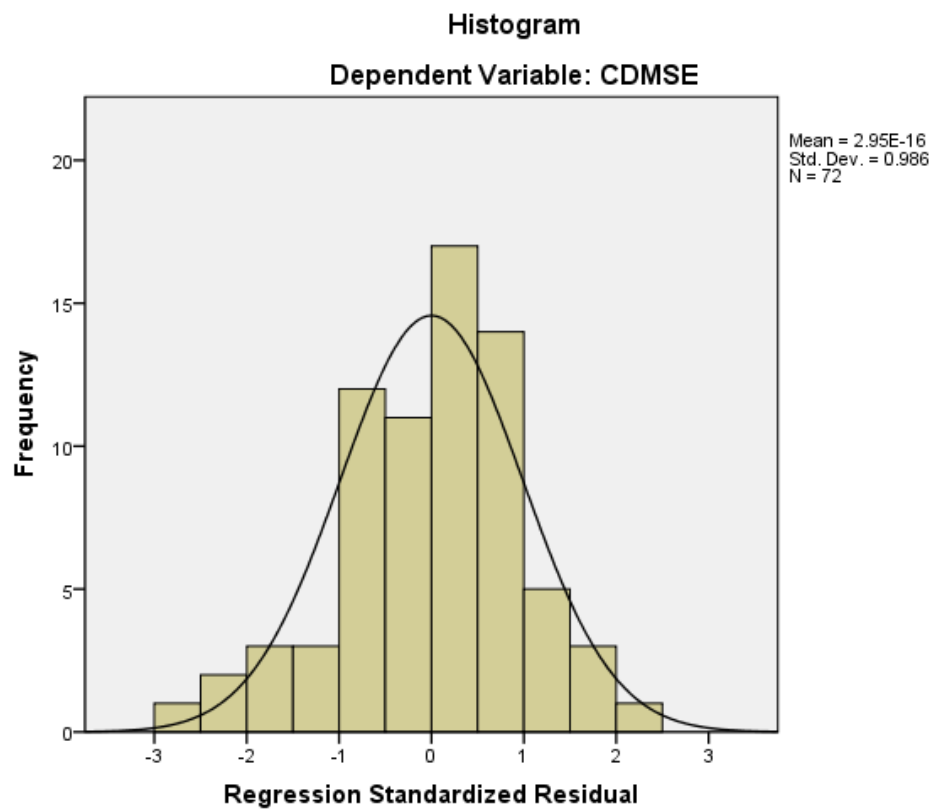
- Fleming, G. M., Simmons, J. H., Xu, M., Gesell, S. B., Brown, R. F., Cutrer, W. B., Gigante, J., & Cooper, W. O. (2015). A facilitated peer mentoring program for junior faculty to promote professional development and peer networking. *Academic Medicine*, 90(6), 819-826. <https://doi.org/10.1097/acm.0000000000000705>
- Frey, C. U., & Rothlisberger, C. (1996). Social support in healthy adolescents. *Journal of Youth and Adolescence*, 25(1), 17-31. <https://doi.org/10.1007/bf01537378>
- Gati, I., Landman, S., Davidovitch, S., Asulin-Peretz, L., & Gadassi, R. (2010). From career decision-making styles to career decision-making profiles: A multidimensional approach. *Journal of Vocational Behavior*, 76(2), 277-291. <https://doi.org/10.1016/j.jvb.2009.11.001>
- Ginevra, M. C., Nota, L., & Ferrari, L. (2015). Parental support in adolescents' career development: Parents' and children's perceptions. *The Career Development Quarterly*, 63(1), 2-15. <https://doi.org/10.1002/j.2161-0045.2015.00091.x>
- Gomes, S. B., & Deuling, J. K. (2019). Family influence mediates the relation between helicopter-parenting and millennial work attitudes. *Journal of Managerial Psychology*, 34(1), 2-17. <https://doi.org/10.1108/jmp-12-2017-0450>
- Himle, D. P., Jayaratne, S., & Thyness, P. (1989). The effects of emotional support on burnout, work stress and mental health among Norwegian and American social workers. *Journal of Social Service Research*, 13(1), 27-45. https://doi.org/10.1300/j079v13n01_02
- Jacobs, S. R., & Dodd, D. (2003). Student burnout as a function of personality, social support, and workload. *Journal of College Student Development*, 44(3), 291-303. <https://doi.org/10.1353/csd.2003.0028>
- Jemini-Gashi, L., Duraku, Z. H., & Kelmendi, K. (2019). Associations between social support, career self-efficacy, and career indecision among youth. *Current Psychology*. <https://doi.org/10.1007/s12144-019-00402-x>
- Kelly, K. R., & Shin, Y. J. (2008). Relation of neuroticism and negative career thoughts and feelings to lack of information. *Journal of Career Assessment*, 17(2), 201-213. <https://doi.org/10.1177/1069072708329029>
- Kim S, & Yang S. (2019). The effects of Korean college students' self-identity on career decision making self-efficacy. *Social Behavior and Personality*, 47(9), 1-6. <https://doi.org/10.2224/sbp.8127>
- Kouros, C. D., Pruitt, M. M., Ekas, N. V., Kiriaki, R., & Sunderland, M. (2016). Helicopter parenting, autonomy support, and college students' mental health and well-being: The moderating role of sex and ethnicity. *Journal of Child and Family Studies*, 26(3), 939-949. <https://doi.org/10.1007/s10826-016-0614-3>
- Kracke, B. (2002). The role of personality, parents and peers in adolescents career exploration. *Journal of Adolescence*, 25(1), 19-30. doi:10.1006/jado.2001.0446
- Krass, L. J., & Hughey, K. F. (1999). The impact of an intervention on career decision-making self-efficacy and career indecision. *Professional School Counselling*, 2(5), 384.
- Kvasková, L., Hlado, P., Juhaňák, L., & Macek, P. (2023). Self-esteem and career adaptability: Moderating roles of parental and peer support. *The Career Development Quarterly*, 71(2), 84-96. <https://doi.org/10.1002/cdq.12319>
- Kwon, K.-A., Yoo, G., & De Gagne, J. C. (2017). Does culture matter? A qualitative inquiry of helicopter parenting in Korean American college students. *Journal of Child and Family Studies*, 26(7), 1979-1990. <https://doi.org/10.1007/s10826-017-0694-8>
- Kytle, J., & Bandura, A. (1978). Social learning theory. *Contemporary Sociology*, 7(1), 84. <https://doi.org/10.2307/2065952>
- Lee, J., & Kang, S. (2018). Perceived helicopter parenting and Korean emerging adults' psychological adjustment: The mediational role of parent-child affection and pressure from parental career expectations. *Journal of Child and Family Studies*, 27(11), 3672-3686. <https://doi.org/10.1007/s10826-018-1193-2>
- LeMoyne, T., & Buchanan, T. (2011). Does "hovering" matter? Helicopter parenting and its effect on well-being. *Sociological Spectrum*, 31(4), 399-418. <https://doi.org/10.1080/02732173.2011.574038>

- Li, Y. (2018). Upward social comparison and depression in social network settings. *Internet Research*. <https://doi.org/10.1108/intr-09-2017-0358>
- Luebke, A. M., Mancini, K. J., Kiel, E. J., Spangler, B. R., Semlak, J. L., & Fussner, L. M. (2016). Dimensionality of helicopter parenting and relations to emotional, decision-making, and academic functioning in emerging adults. *Assessment*, 25(7), 841-857. <https://doi.org/10.1177/1073191116665907>
- McInnes, T., & Chen, C. P. (2011) Chronic career indecision: Amalgamate career development theories and action research perspectives. *International Journal of Action Research*, 7(1), 80-100.
- National Centre for Education Statistics. (2015). *The condition of education 2005*. <https://nces.ed.gov/pubs2005/2005094.pdf>
- Nawaz, A. (2016). Impacts of self-efficacy on organizational commitment of academicians: A case of Gomal University. *Journal of Information & Knowledge Management*, 6(1), 36-42.
- Nawaz, S., & Gilani, N. (2011). Relationship of parental and peer attachment bonds with career decision making self-efficacy among adolescents and post-adolescents. *Journal of Behavioral Sciences*, 21(1), 33-47.
- Patel, S. G., Salahuddin, N. M., & O'Brien, K. M. (2008). Career decision-making self-efficacy of Vietnamese adolescents. *Journal of Career Development*, 34(3), 218-240. <https://doi.org/10.1177/0894845307308488>
- Paulsen, A. M., & Betz, N. E. (2004). Basic confidence predictors of career decision-making self-efficacy. *The Career Development Quarterly*, 52(4), 354-362. <https://doi.org/10.1002/j.2161-0045.2004.tb00951.x>
- Perez, M., & Gati, I. (2017). Advancing in the career decision-making process: The role of coping strategies and career decision-making profiles. *International Journal for Educational and Vocational Guidance*, 17(3), 285-309. <https://doi.org/10.1007/s10775-016-9334-x>
- Pethrick, H., Nowell, L., Oddone Paolucci, E., Lorenzetti, L., Jacobsen, M., Clancy, T., & Lorenzetti, D. L. (2017). Psychosocial and career outcomes of peer mentorship in medical resident education: a systematic review protocol. *Systematic Reviews*, 6(1). <https://doi.org/10.1186/s13643-017-0571-y>
- Reed, K., Duncan, J. M., Lucier-Greer, M., Fixelle, C., & Ferraro, A. J. (2016). Helicopter Parenting and Emerging Adult Self-Efficacy: Implications for Mental and Physical Health. *Journal of Child and Family Studies*, 25(10), 3136-3149. <https://doi.org/10.1007/s10826-016-0466-x>
- Robertson, H. C., & Eschenauer, R. K. (2020). Student veteran perceptions of college-to-career transition. *College Student Affairs Journal*, 38(1), 52-64. <https://doi.org/10.1353/csaj.2020.0003>
- Ross, R. R., Altmaier, E. M., & Russell, D. W. (1989). Job stress, social support, and burnout among counseling center staff. *Journal of Counseling Psychology*, 36(4), 464-470. <https://doi.org/10.1037/0022-0167.36.4.464>
- Rueger, S. Y., Malecki, C. K., & Demaray, M. K. (2008). Gender differences in the relationship between perceived social support and student adjustment during early adolescence. *School Psychology Quarterly*, 23(4), 496-514. <https://doi.org/10.1037/1045-3830.23.4.496>
- Ruschoff, B., Salmela-Aro, K., Kowalewski, T., Dijkstra, J. K., & Veenstra, R. (2018). Peer networks in the school-to-work transition. *Career Development International*, 23(5), 466-477. <https://doi.org/10.1108/cdi-02-2018-0052>
- Sandler, M. E. (2000). Career decision-making self-efficacy, perceived stress, and an integrated model of student persistence: A structural model of finances, attitudes, behaviour, and career development. *Research in Higher Education*, 41(5), 537-580. <https://doi.org/10.1023/a:1007032525530>
- Sarin, R. K. (2013). Multi-attribute Utility Theory. *Encyclopedia of Operations Research and Management Science*, 1004-1006. https://doi.org/10.1007/978-1-4419-1153-7_644
- Sarwar, A., & Azmat, A. (2013). Factors having impact on the career decisions: Study of business graduates in Pakistan. *Business Management Dynamics*, 2(7), 9-19.
- Schiffrin, H. H., Erchull, M. J., Sendrick, E., Yost, J. C., Power, V., & Saldanha, E. R. (2019). The effects of maternal and paternal helicopter parenting on the self-determination and well-being of emerging adults. *Journal of Child and Family Studies*, 28(12), 3346-3359. <https://doi.org/10.1007/s10826-019-01513-6>

- Segal, G., Borgia, D., & Schoenfeld, J. (2002). Using Social Cognitive Career Theory to predict self-employment goals. *New England Journal of Entrepreneurship*, 5(2), 47-56. <https://doi.org/10.1108/neje-05-02-2002-b007>
- Simmons, A. N. (2008). A reliable sounding board: Parent involvement in students' academic and career decision making. *NACADA Journal*, 28(2), 33-43. <https://doi.org/10.12930/0271-9517-28.2.33>
- Situmorang, D. D., & Salim, R. M. (2021). Perceived parenting styles, thinking styles, and gender on the career decision self-efficacy of adolescents: How & why? *Heliyon*, 7(3), e06430. <https://doi.org/10.1016/j.heliyon.2021.e06430>
- Swartz, E., & Amatucci, F. (2018). An interdisciplinary framework to deconstruct second-generation gender bias. *Contextual Embeddedness of Women's Entrepreneurship*, 233-246. <https://doi.org/10.4324/9781315574042-17>
- Talib, M. A., & Aun, T. K. (2009). Predictors of career indecision among Malaysian Undergraduate students. *European Journal of Social Science*, 8(2), 215- 224.
- Triandis, H. C. (2004). The many dimensions of culture. *Academy of Management Perspectives*, 18(1), 88-93. <https://doi.org/10.5465/ame.2004.12689599>
- Wang, S., Li, X., Liu, H., Liu, S., & Lin, X. (2022). Family social class as a predictor of college students' career decisionmaking self-efficacy. *Social Behavior and Personality: an international journal*, 50(9), 1-11. <https://doi.org/10.2224/sbp.11713>
- Wang, Z., & Fu, Y. (2015). Social support, social comparison, and career adaptability: A moderated mediation model. *Social Behavior and Personality: an international journal*, 43(4), 649-659. <https://doi.org/10.2224/sbp.2015.43.4.649>
- Westergaard, J. (2012). Career guidance and therapeutic counselling: Sharing 'what works' in practice with young people. *British Journal of Guidance & Counselling*, 40(4), 327-339. <https://doi.org/10.1080/03069885.2012.687711>
- Wright, S. L., Perrone-McGovern, K. M., Boo, J. N., & White, A. V. (2014). Influential factors in academic and career self-efficacy: Attachment, supports, and career barriers. *Journal of Counselling and Development*, 92(1), 36-46. <https://doi.org/10.1002/j.1556-6676.2014.00128.x>
- Xing, X., & Rojewski, J. W. (2018). Family influences on career decision-making self-efficacy of Chinese secondary vocational students. *New Waves*, 21(1), 48-67.
- Yang, E., & Gysbers, N. C. (2007). Career transitions of college seniors. *The Career Development Quarterly*, 56(2), 157-170. <https://doi.org/10.1002/j.2161-0045.2007.tb00028.x>
- Zhang, H., & Huang, H. (2018). Decision-making self-efficacy mediates the peer support-career exploration relationship. *Social Behavior and Personality: an international journal*, 46(3), 485-498. <https://doi.org/10.2224/sbp.6410>
- Zhong, L., Qian, Z., & Wang, D. (2020). How does the servant supervisor influence the employability of postgraduates? Exploring the mechanisms of self-efficacy and academic engagement. *Frontiers of Business Research in China*, 14(1). <https://doi.org/10.1186/s11782-020-00079-1>

Appendix A

Graphs of Normality



Appendix B

Graph of Heteroscedasticity

Scatterplot

Dependent Variable: CDMSE

