



# Exploring the desire of Filipino engineering professionals to work abroad using the ECT-TPB Theory

Rex Revian A. Guste<sup>a</sup>, Ardvin Kester S. Ong<sup>a,\*</sup>, John Francis T. Diaz<sup>b</sup>, Maela Madel L. Cahigas<sup>a</sup>, Ma. Janice J. Gumasing<sup>c</sup>

<sup>a</sup> School of Industrial Engineering and Engineering Management, Mapúa University, 658 Muralla St., Intramuros, Manila 1002, Philippines

<sup>b</sup> Department of Finance and Accounting, Asian Institute of Management, 123 Paseo de Roxas, Legazpi Village, Makati 1229, Metro Manila, Philippines

<sup>c</sup> Department of Industrial and Systems Engineering, Gokongwei College of Engineering, De La Salle University, 2401 Taft Ave., Manila 1007, Philippines

## ARTICLE INFO

### Keywords:

Behavioral intention  
Engineering professionals  
Migration  
Overseas employees  
Expectation-Confirmation Theory

## ABSTRACT

The rising globalization of the workforce needs an awareness of the elements that influence professionals' decisions to work overseas. Especially in the Philippines where professionals are migrating abroad, there is little to no literature available for the behavioral intention and satisfaction of the movement. This study considered an integrated theoretical model based on the Extended Theory of Planned Behavior (TPB) and Expectation-Confirmation Theory (ECT) to analyze the factors influencing Filipino engineering professionals' aspirations to work overseas. Data were obtained from 256 engineers who worked abroad and analyzed using structural equation modeling. Results showed how confirmation has a substantial impact on satisfaction, which in turn influences the willingness to pursue overseas assignments. Expectation influences confirmation as the second most important component, although its direct effect on satisfaction is insignificant. The study revealed that confirmation indirectly affected behavioral intentions more than expectation, implicating to be the driver of satisfaction among Filipino engineering professionals interested in working overseas. Moreover, confirmation is strongly influenced by expectation, and pleasure has a considerable impact on behavioral intention. Attitude and perceived behavioral control are also important factors in forming the intention to work abroad, although subjective norms have less influence. The findings offer managerial insights locally on how to improve the workforce and culture of engineering professionals in the Philippines, hence could increase job satisfaction and commitment to local employment. Lastly, the integrated model provides a comprehensive picture of the elements influencing expatriation intentions and serves as a solid foundation for future study on professional mobility.

## 1. Introduction

Migration has always been a critical component of human civilization, inextricably linked to global socioeconomic dynamics (Anderson et al., 2021). Despite advances in remote work and virtual cooperation, migration remains important because economic, social, and personal motivations continue to motivate individuals to relocate (Vertovec, 2007). Many people move, particularly those from underprivileged areas, owing to a lack of job prospects, salary disparities, and precarious working conditions. Despite possible hurdles, professionals continue to go overseas in search of higher pay, job stability, and opportunities for advancement.

However, moving is not without its obstacles. Migrants frequently

encounter legal impediments, cultural difficulties, and workplace discrimination, making relocation hard. Separation from family and support networks also causes emotional distress. While migration provides host nations with a variety of talents and viewpoints, it also poses obstacles to social integration and labor adaptation (Vertovec, 2007). These challenges underline the need of doing research on migration decisions and providing expert help.

Migrants provide essential skills and knowledge that promote innovation and support critical industries such as healthcare, agriculture, and technology (Portes & Rumbaut, 2014). By managing workforce shortages, they increase productivity and guarantee vital industries run smoothly (Cho et al., 2012). Migration patterns reflect a combination of economic, social, and political reasons, with migrants playing critical

\* Corresponding author.

E-mail addresses: [rraguste@mymail.mapua.edu.ph](mailto:rraguste@mymail.mapua.edu.ph) (R.R.A. Guste), [aksong@mapua.edu.ph](mailto:aksong@mapua.edu.ph) (A.K.S. Ong), [jdiaz@aim.edu](mailto:jdiaz@aim.edu) (J.F.T. Diaz), [mmcahigas@mapua.edu.ph](mailto:mmcahigas@mapua.edu.ph) (M.M.L. Cahigas), [ma.janice.gumasing@dlsu.edu.ph](mailto:ma.janice.gumasing@dlsu.edu.ph) (Ma.J.J. Gumasing).

<https://doi.org/10.1016/j.actpsy.2025.104913>

Received 2 November 2024; Received in revised form 11 March 2025; Accepted 12 March 2025

Available online 13 March 2025

0001-6918/© 2025 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

roles in important services, particularly during the COVID-19 epidemic in Italy, Spain, Brazil, and the United States (Anderson et al., 2021).

Migration in the Philippines has a long history that has been affected by colonialism, political instability, and economic challenges (Debonneville, 2021). Filipinos have long sought better chances overseas due to restricted prospects at home, motivated by a combination of economic challenges, educational objectives, and familial aspirations (Espiritu, 2005; Orbeta & Abrigo, 2011).

Engineering experts play an important role in determining national development since they are guardians of scientific progress and drivers of industrial advancement (Yacat, 2011). However, the increasing exodus of Filipino engineers raises questions regarding their motivations, goals, and the long-term consequences of their departure on the local and global workforces. This ongoing tendency adds to brain drain, undermining the country's economic and social growth, thus it is critical to understand the causes influencing their migration. Working overseas presents several hurdles for Filipino engineers, including cultural adaptation, language barriers, credential recognition, family separation, and economic trade-offs. These challenges affect not just their professional performance and well-being, but also the long-term viability of the local engineering workforce.

Prior research has investigated many elements of skilled migration, including cultural and professional adaptability (Baruch et al., 2007), credential recognition concerns (Hawthorne, 2013), and economic motivations for migrating (Docquier & Rapoport, 2012). However, research explicitly analyzing Filipino engineers are limited. To have a better understanding regarding this, the study uses the Theory of Planned Behavior (TPB) and Expectation Confirmation Theory (ECT) framework to gain a better understanding of the elements that influence their migration decisions and experiences.

Globally, migration is driven by a desire for better prospects, with the Filipino diaspora playing a significant role (Asis, 2013). Approximately 10 million Filipinos live overseas, with over 1 million departing each year for employment, considerably affecting labor markets (Almendral & Morales, 2018; San Juan, 2009). Engineers, healthcare professionals, and IT specialists are among the highest-paid OFWs, earning up to P99,000 per month. Engineers, in example, earn an average of P59,000 overseas, which is significantly greater than the P27,000 average in the Philippines (Padillo, 2018). The skilled migration of Filipino engineers has received international attention (Cenas et al., 2020). Despite the Philippines' status as a vital source of technical talent, research on Filipino engineers' relocation is scarce. While research focuses on healthcare workers and IT experts, the migration patterns and consequences on Filipino engineers warrant additional investigation.

Previous research has shed light on similar aspects. Dating back to the study of Tacoli (1999) who investigated the reconfiguration of gender inequalities among Filipino labor migrants in Rome, they provided insights into the subtle processes that shape migration decisions in specific social situations. O'Steen's (2021) recent study focused on bilateral labor agreements and their impact on Filipino migration, using an instrumental variable method to clarify the complex policy factors that influence migration patterns. Scott (2010) investigated the destination choices of migratory engineers in the United States, focusing on the role of career prospects and amenities in affecting migration preferences. Furthermore, Christou and Kofman's (2022) study gave an overview of gender and migration, emphasizing the significance of gender factors in understanding migratory dynamics. Existing research on brain drain has investigated a variety of variables driving skilled migration both internationally and in the Philippines. Studies have looked at labor mobility patterns, economic inequities, and policy interventions that influence migration decisions (Docquier & Rapoport, 2012; Hawthorne, 2013). In the Philippines, research has mostly focused on gender dynamics (Christou & Kofman, 2022; Tacoli, 1999), policy implications on labor migration (O'Steen, 2021), and Filipino professionals' destination preferences (Scott, 2010). While these studies

give significant insights, they may not completely represent the particular reasons and challenges that Filipino engineers confront when deciding to go overseas.

Despite the growing worldwide need for technical skills, few studies have looked at the mobility of Filipino engineering professionals. Most research has focused on wider migratory patterns rather than the interaction of career goals, job satisfaction, and behavioral intentions specific to this workforce. To close this gap, this study combines the Theory of Planned Behavior (TPB) and Expectation Confirmation Theory (ECT) to gain a better understanding of the important elements driving Filipino engineers' migration decisions. Its goal is to educate policies that balance talent retention and worldwide mobility, as well as to help engineers make well-informed career decisions.

Addressing this gap is critical for comprehending the complexity of skilled migration, maximizing its advantages, and minimizing its drawbacks. The movement of Filipino engineers has far-reaching consequences for both people and society, affecting labor stability, economic development, and industrial competitiveness.

This study attempts to investigate the important elements influencing Filipino engineers' migration decisions by combining the Theory of Planned Behavior (TPB) and Expectation Confirmation Theory (ECT). It will use structural equation modeling (SEM) to examine both direct and indirect factors that influence behavioral intention, satisfaction, and long-term career decisions. The project aims to answer the following research questions:

1. What variables directly impact Filipino engineers' behavioral intentions to work abroad?
2. What variables indirectly influence their migration decisions through satisfaction and expectation confirmation?
3. Is the TPB-ECT model adequate for future migration research?
4. What practical implications may be drawn from the key factors highlighted in this study?
5. What managerial suggestions may be established to help improve the local engineering workforce and prevent talent loss?

By addressing these questions, the study aimed to provide insights that can inform policy decisions, support industry leaders, and guide engineers in making career choices that align with both personal and professional goals.

This research has practical consequences for policymakers and stakeholders in skilled migration policies. Understanding Filipino engineering professionals' motives may help drive strategies for retaining talent, improving local job prospects, and increasing the competitiveness of the Philippine engineering workforce. Finally, this study advocated evidence-based decision-making in industrial engineering to promote long-term human capital development.

## 2. Related studies and conceptual framework

### 2.1. Theories and related studies

The Expectation Confirmation Theory (ECT) is commonly used to investigate how initial expectations affect satisfaction and future behaviors. ECT, which originated in consumer behavior research (Oliver, 1980), proposes that people establish expectations before they experience a product or service. Following the actual event, people assess whether their expectations were confirmed or not, resulting in pleasure or dissatisfaction (Bhattacharjee, 2001). For example, Van Ryzin (2004) used ECT to investigate how expectation disconfirmation affects employee happiness and performance. The data implies that meeting or exceeding employees' expectations leads to increased job satisfaction and performance. In contrast, failure to meet expectations can lead to discontent and poor performance.

ECT has been used to better understand the elements that influence employees' decisions to stay with their current employers or seek new

chances. For example, Harvey and Buckley (1997) investigated the effects of realistic job previews and expectation-lowering processes for expatriate managers, demonstrating how unfulfilled expectations can contribute to job discontent and turnover intentions. This study demonstrates the theory's applicability to understand work satisfaction.

Despite its efficacy, ECT has limits since it concentrates on cognitive evaluation while ignoring emotional impacts on behavior (Premkumar & Bhattacharjee, 2008) and assumes expectations remain constant despite previous experiences (Kim, 2010). It also focuses on post-adoption behaviors without fully considering pre-adoption decisions (Liao et al., 2009). Huang and Zou (2024) built on ECT by investigating AI-assisted English learning, demonstrating that pleasure and desire to interact with AI had a substantial impact on satisfaction and sustained usage. Their findings reveal that expectation confirmation is influenced by emotional and sensory elements, emphasizing the need to consider both cognitive and affective components of user adoption.

Using ECT alone offers difficulties in completely comprehending behavioral goals. The theory largely explains satisfaction but excludes external elements like as social influence, perceived control, and subjective standards, all of which play important roles in decision making (Bhattacharjee & Lin, 2010). Furthermore, ECT does not account for habits or prior experiences, making it less successful in predicting long-term behavioral changes (Hsu & Chiu, 2004). Because of these limitations, this study combines the Theory of Planned Behavior (TPB) with ECT to create a more comprehensive framework for analyzing migration intentions.

Comparatively, the Theory of Planned conduct (TPB) explains human conduct by considering three main factors: attitude toward behavior, subjective standards, and perceived behavioral control (Ajzen, 1991). Attitude represents an individual's assessment of the conduct's acceptability, subjective norms capture felt societal influences, and perceived behavioral control evaluates an individual's confidence in carrying out the behavior. For example, it has been used to study the factors that influence employees' intentions to stay with organizations in the Philippines or pursue chances overseas, hence offering insights into career decision-making processes (Hoppe & Fujishiro, 2017). Moreover, Van Dalen and Henkens (2013) utilized TPB to study emigration intentions in the Netherlands, discovering that social factors and career chances overseas had a major impact on migration decisions.

Although TPB is a strong framework, it has several drawbacks. The idea claims that behavioral intentions are generated by logical decision-making, leaving out the influence of emotions and spontaneous behaviors (Sniehotta et al., 2014). Furthermore, TPB does not fully capture how previous actions impact future decisions, making it less useful for understanding habitual or experience-driven behaviors (Conner & Armitage, 1998).

To expand on the previously studied Expectation Confirmation Theory (ECT) and Theory of Planned Behavior (TPB), it is necessary to investigate additional well-known migration theories. While ECT emphasizes expectation and satisfaction alignment and TPB explains behavioral intention, other frameworks such as the push-pull model, human capital theory, and gravity model have also been frequently employed in migration research. Understanding their uses and limits helps to demonstrate why an integrated ECT-TPB method is most suited for this investigation.

Previous research on skilled migration has used a variety of theoretical frameworks to explain the movement of professionals across borders. The push-pull model (Lee, 1966) is a popular paradigm for categorizing migration causes as push factors (e.g., low wages, lack of career progression, political instability) or pull ones (e.g., better employment opportunities, higher earnings, greater living circumstances). This model has been widely used in research on labor migration (De Haas, 2010; Massey et al., 1993), however it only provides a macro-level view, ignoring individual decision-making processes and psychological impacts.

Additionally, according to Becker's (1964) human capital theory,

people relocate to optimize their talents and earning potential, viewing education and job experience as investments. While this approach has been effective in explaining the economic justification for migrating (Borjas, 1989; Chiswick, 1999), it fails to account for behavioral and satisfaction-based elements, which are important in understanding Filipino engineers' long-term career choices.

In addition, the gravity model (Anderson, 2011; Ravenstein, 1885) has been utilized in migration studies to forecast labor mobility based on economic size and geographical distance between nations. Although this paradigm adequately explains large-scale migration trends (Harris & Todaro, 1970), it is more suited to policy-level assessments than evaluating individual motives and experiences.

Given these limitations, this study combines ECT and TPB to create a more specific framework for measuring behavioral intention and overall behavior in migration choices. Previous research indicates that integrating these ideas improves predicted accuracy. Meng et al. (2023) discovered that using both theories gave greater insights on expatriate job satisfaction and retention. This study compensates for expectation disconfirmation by including ECT, whereas TPB takes into consideration behavioral goals and social variables.

Previous research has demonstrated that integrating many behavioral theories improves forecast accuracy. For example, Leou and Wang (2023) used TPB and the Expectation Confirmation Model (ECM) to forecast visitors' intents to return to a place, providing a more comprehensive approach to understanding the decision to go overseas. In the same line, this study employs both Expectation Confirmation Theory (ECT) and TPB to investigate the migration decisions of Filipino engineering professionals, providing a more thorough examination of the factors that influence their desire to work overseas.

## 2.2. Conceptual framework

To better understand the complex interplay of variables influencing Filipino engineering professionals' desire to work abroad, the conceptual framework (Fig. 1) sought to identify the complex interplay of latent factors such as perceived behavioral control, subjective norm, attitude, behavioral intention, satisfaction, expectation, and confirmation.

The conceptual framework for examining Filipino engineering professionals' desire to go abroad contains eight latent variables, each of which contributes significantly to representing the intricacies of this decision-making process. Perceived Behavioral Control (PBC) refers to the perceived ease or difficulty of controlling the decision to work overseas (Ajzen, 2002). A better sensation of control is likely to improve behavioral intention, which will lead to more job satisfaction. Subjective Norm (SN) considers social pressure from influential persons and is seen to have a significant influence on behavioral intentions, ultimately increasing overall satisfaction (Ham et al., 2015). In addition, attitude (ATT) represents an overall assessment of the benefits and cons of working overseas (Mol et al., 2005). It is projected to have a significant influence on behavioral intention, hence increasing pleasure. Behavioral intention (BI) is a fundamental trait that shows an intentional decision to work abroad, influenced by PBC, SN, ATT, and motivation, and has a direct relationship to satisfaction (Mishra & Singh, 2022). In this study, the primary latent variable, satisfaction (SAT), evaluates enjoyment and fulfillment and is influenced by BI, anticipation, and confirmation (Fischer, 2012). To which, expectation (EXP) refers to the expected outcome, which has a significant influence on both pleasure and confirmation; and Confirmation (CONF) is the alignment of actual outcomes with expectations, which impacts satisfaction and the overall evaluation of the decision-making process (Hui et al., 2024).

According to Ajzen's (2020) model, PBC is one of the most reliable indicators of intention across several domains. This idea is especially prevalent in migration research such as the empirical research that illuminates the critical significance of PBC in altering the assimilation trajectories of international migrants in China (Chen & Fan, 2022). The reliability and relevance of PBC in TPB derive from its fundamental role

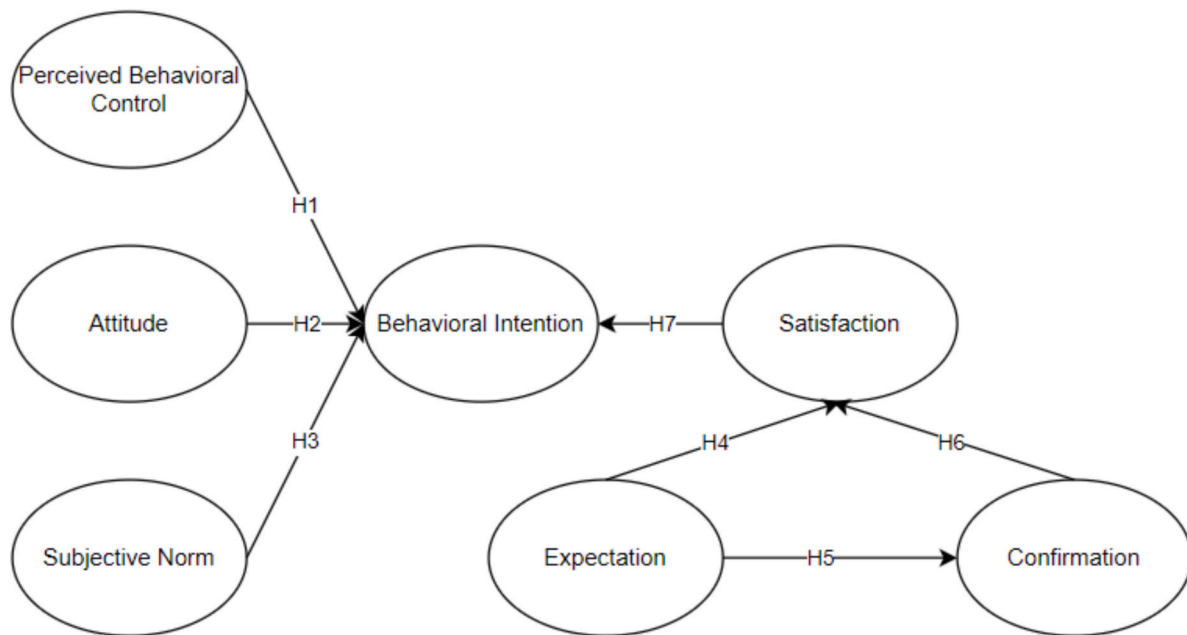


Fig. 1. Conceptual framework.

in predicting behavioral intentions across several domains. It measures people's perceptions about their ability to do an activity, taking into account both internal elements like abilities and resources, as well as external factors like environmental restrictions. PBC is especially important in migration studies since the migration process is multidimensional. Financial resources, social networks, legal procedures, and cultural adaption obstacles all influence how people perceive their ability to regulate migration-related behaviors. [Chen and Fan \(2022\)](#) in China provided empirical evidence for this, demonstrating how differences in PBC among international migrants affect their integration trajectories. By explaining the critical role of PBC in affecting migration decisions and results, researchers gain a better understanding of the fundamental mechanisms that drive human behavior in changing socio-cultural settings.

Similarly, [Yazdanpanah and Zobeidi \(2017\)](#) revealed how PBC impacted Iranian migrants' movement patterns, specifically their preference for relocation to rural locations. The argument that PBC has an impact on Iranian migrants' mobility patterns, as explained by [Yazdanpanah and Zobeidi \(2017\)](#), is that the complex interplay between people's beliefs of control and their migration decisions were evident. In Iran, where socioeconomic and political variables influence migration trends, PBC plays an important role in driving individuals' inclinations for relocating to rural areas. Iranian migrants' belief of their abilities to adapt to rural surroundings, secure livelihoods, and integrate into local communities strongly impact their migrating decisions. Furthermore, PBC considers not only people's personal views but also environmental issues such as resource availability, job possibilities, and socio-cultural acceptance in rural regions. Thus, by investigating the influence of PBC on migrants' mobility patterns, [Yazdanpanah and Zobeidi \(2017\)](#) provided important insights into the complicated decision-making processes that drive migratory behavior in distinct socio-economic settings and differences.

Furthermore, the study of migration intention in Ethiopia by [Assfaw and Minaye \(2022\)](#) confirms the importance of PBC, indicating a direct and significant influence on migration decisions. The importance of PBC in their study reflected on the fundamental role in shaping individuals' perceptions of their ability to engage in migration-related behaviors. In Ethiopia, where socioeconomic disparities and environmental variables influence migration patterns, people's opinions about their ability to regulate migration processes have a direct impact on their intentions to

move. PBC considers a variety of criteria, including availability to resources, employment possibilities, social networks, and perceived feasibility of migration paths. [Assfaw and Minaye's \(2022\)](#) findings demonstrated how people's confidence in their capacity to negotiate these variables affects their migration intentions. As a result, PBC has a direct and considerable impact on migration decisions in Ethiopia because it represents individuals' assessments of the feasibility and attainability of migrating as a way of achieving socio economic goals in the face of contextual difficulties. Given the persuasive results of these studies, it is logical to hypothesize that:

**H1.** PBC significantly influences the BI of Filipino engineering professionals' desire to work abroad.

[LaMorte \(2019\)](#) defined attitude as a reference to an individual's evaluative position toward a given activity, which can be positive or negative. Extensive research has demonstrated the critical importance of attitude as a predictor of behavioral intention across a variety of circumstances. [Lee and Kim \(2020\)](#) and [Li et al. \(2022\)](#) investigated the effect of people's expectation and attitudes with intentions in a variety of areas, including online restaurant reviews and users' continuing use of social fitness monitoring applications. Their findings highlighted how people's perceptions about certain situations impacted their attitude and intention. Applying this insight to Filipino engineering professionals, it could be implied that their attitudes toward working abroad, influenced by their expectations and perception about job prospects and work conditions overseas, have a significant impact on their behavioral intention and subsequent satisfaction with the decision to seek international employment opportunities. Thus, it is plausible to hypothesize that:

**H2.** ATT significantly influences the BI of Filipino engineering professionals' desire to work abroad.

The impact of SN on BI has received significant attention in social psychology ([Ambak et al., 2016](#)). [Karaiskos et al. \(2010\)](#) emphasized the strength of SN as a predictor of intentionality. It was seen that SN had a considerable impact on people's intents by influencing their beliefs of societal expectations, norms, and values about certain activities. Individuals are naturally predisposed to match their intents with existing social standards, seeking reinforcement and acceptability from their social networks. [Karaiskos et al. \(2010\)](#) revealed that the socio-cultural



background has a significant impact on influencing people's intents and behaviors, emphasizing the necessity of taking social factors into account when studying human decision-making processes.

Jin et al. (2022) for example, investigated the migration intention of university students to first-tier cities in China and discovered that SN played an important role in determining the intention. This was because, from their prior standing, university students are significantly impacted by the social expectations and conventions that exist within their academic and peer networks. Thus, SN acts as a guiding factor, molding students' conceptions of what is acceptable and desirable in terms of migration to first-tier cities. Similarly, the study of Kaplan et al. (2016) shared the importance of SN in the effect of social networks and norms on the inter-regional migration intentions of knowledge workers in Germany. It was seen that within their investigation, SN had a critical impact in altering knowledge workers' attitudes of migrating as a realistic choice. Knowledge professionals were persuaded to seek or avoid inter-regional mobility by aligning their goals with prevalent SN and expectations within their professional networks. It was further discussed that social variables have a complex impact on migration intentions, underlining the need of considering both individual qualities and social circumstances when evaluating migration behavior across certain occupational groups. Given the similar findings across these studies, it is plausible to hypothesize that:

**H3.** Subjective Norm (SN) significantly influences the BI of Filipino engineering professionals' desire to work abroad.

According to the ECT, expectations and perceived performance contribute to satisfaction. Expectations have been found to be critical determinants in a variety of decision-making situations (Bhattacharjee, 2001). In a study conducted by Xiujun and Xin (2019), anticipation has a role in migrating to another nation. Expectations demonstrated a large direct association with happiness with the move, which is the primary reason for migrating. Moreover, Fu et al. (2018) and Valvi and West (2013) investigated the determinants of loyalty and e-loyalty, respectively, using ECT. Their research emphasized the importance of individuals' attitudes and perceptions, which are shaped by their expectations and the confirmation of those expectations in generating satisfaction and loyalty. By applying this understanding to the context of Filipino engineering professionals' intentions to work abroad, we can conclude that their attitudes toward international job opportunities, influenced by their expectations and confirmation thereof, are critical in determining their behavioral intention and subsequent satisfaction with the decision to pursue careers abroad.

Joardar and Weisang (2019) conducted a multi-country study to examine how expectations of career growth and development affect expatriates' satisfaction and subsequent career plans. Their findings showed that when professionals have favorable career advancement expectations, they are more satisfied with the prospect of working abroad, which improves their likelihood of pursuing such possibilities. Furthermore, Boies and Rothstein (2002) evaluated the impact of job and career satisfaction on managers' interest in overseas assignments. According to their findings, managers' BI to seek international assignments are strongly influenced by their expectations of career happiness. This study emphasizes the direct relationship between expectations, satisfaction, and the intention to work overseas, supporting the notion that anticipation influences satisfaction, which in turn influences behavioral intention.

Even in earlier times, Birdseye and Hill (1995) conducted an empirical assessment of the individual, organizational, and environmental factors that influence expatriate turnover tendencies. Their findings presented that expectations about job positions and career growth have a substantial impact on expatriates' decision to work abroad. This confirmation then has an impact on their job happiness, as individuals whose expectations are met or surpassed are more likely to report feeling satisfied. Furthermore, Vidal et al. (2007) investigated the causes of repatriates' job satisfaction and its impact on turnover

intentions. Their research demonstrates that the alignment of initial expectations and actual work experience is critical in determining repatriates' job satisfaction.

Furthermore, Sims (2011) investigated the role of cultural intelligence in predicting job satisfaction and contract renewal intentions among expatriate teachers in Latin America. The study found that when expatriates' expectations are confirmed through positive work experiences, their job satisfaction increases, which then enhances their intention to continue or renew their assignments. This aligns with the hypothesis by demonstrating how expectation confirmation impacts satisfaction and behavioral intention. Similarly, Zhou (2021) examined expatriate satisfaction and motivation within multinational corporations. The study highlights that confirmed expectations contribute significantly to expatriate satisfaction, which in turn influences their motivation and intention to remain in or seek international roles.

By applying these insights to the context of Filipino engineering professionals' desire to work abroad, it is possible to conclude that their satisfaction with international employment opportunities is influenced by their expectations, as well as the confirmation of these expectations regarding job prospects, working conditions, and career advancement abroad. This emphasizes the need of knowing how expectations, confirmation, and satisfaction influence people's judgments about overseas employment prospects upon migration. Using supporting research, the following hypotheses were developed:

**H4.** Expectation influences the satisfaction of Filipino engineering professionals' desire to work abroad, which, in turn, leads to behavioral intention.

**H5.** Expectation influences the confirmation of Filipino engineering professionals' desire to work abroad, which, in turn, leads to satisfaction.

**H6.** Confirmation influences the satisfaction of Filipino engineering professionals' desire to work abroad, which, in turn, leads to behavioral intention.

According to Mamman et al. (2016), intention is an individual's inclination toward or measure of motivation about their plan to engage in or employ a specific action. Numerous research has validated this notion, emphasizing its significance in the acceptance and adoption of diverse issues. For example, BI was said to influence Iranian migrants' movement patterns, specifically their preference for shifting to rural regions (Yazdanpanah & Zobeidi, 2017). Moreover, Van Dalen and Henkens (2008) emphasized on international migration and the role of BI in migration decisions. They argued that people's intents greatly influence their migratory behavior. Similarly, Cai and Wang's (2008) study on rural worker movement emphasizes the relevance of BI as a driving force behind migration, stressing its impact on people's decisions to relocate for better job chances. This idea is consistent with the concept of intention, which states that people gravitate toward activities they believe to be good or useful to them (Ajzen, 2020). Thus, it is plausible to hypothesize that:

**H7.** Satisfaction influences the BI of Filipino engineering professionals' desire to work abroad.

## 3. Methodology

### 3.1. Demographics

Table 1 presents the respondents' descriptive data, collected from January 2024 to June 2024, 256 via a purposive sampling approach. This study was approved by the university ethics committee (FM-RC-22-01-01) prior to distribution and written consent was obtained among participants (FM-RC-22-02-01). This study used a sample size of 250 respondents to achieve acceptable statistical power, reliability, and validity of the SEM analysis (Brown, 2015; Hair, 2010; Kline, 2016; Westland, 2010; Wolf et al., 2013). A digital survey was utilized for the

**Table 1**  
Demographic characteristics.

Characteristics	Category	N	%
Gender	Male	207	80.86 %
	Female	49	19.14 %
Age	18 to 24 years old	9	3.52 %
	25 to 34 years old	189	73.83 %
	35 to 44 years old	28	10.94 %
	45 to 54 years old	20	7.81 %
Area of residence	55 years old and above	12	4.69 %
	National Capital Region (NCR) or Metro Manila	101	39.45 %
	Luzon (excluding NCR)	136	53.13 %
	Visayas	14	5.47 %
Educational attainment	Mindanao	6	2.34 %
	College graduate	239	93.36 %
Work background	Graduate studies graduate	17	6.64 %
	Employed	248	96.88 %
Monthly income in the Philippines	Self-employed or business owner	8	3.13 %
	Less than Php 10,000	11	4.30 %
	Php 10,001–20,000	26	10.16 %
	Php 20,000–30,000	50	19.53 %
	More than Php 30,000	169	66.02 %
Monthly income abroad	Php 30,000–Php 40,000	9	3.52 %
	Php 40,000–Php 50,000	11	4.30 %
	More than Php 50,000	236	92.19 %
Engineering course/ engineering job title	Mechanical Engineering	51	19.92 %
	Electronics Engineering	32	12.50 %
	Manufacturing Engineering	28	10.94 %
	Electrical Engineering	23	8.98 %
	Computer Engineering	22	8.59 %
	Marine Engineering	20	7.81 %
	Civil Engineering	21	8.20 %
	Material Science and Engineering	20	7.81 %
	Industrial Engineering	18	7.03 %
	Chemical Engineering	18	7.03 %
	Environmental Engineering	1	0.39 %
	Aeronautical Engineering	1	0.39 %
	Sanitary Engineering	1	0.39 %
Duration of stay abroad	Less than a Year	57	22.27 %
	1–2 Years	62	24.22 %
	3–5 Years	59	23.05 %
	>5 Years	76	29.69 %
Country abroad that have experience working in	Japan	51	19.92 %
	Singapore	28	10.94 %
	UAE	19	7.42 %
	USA	18	7.03 %
	Taiwan	17	6.64 %
	Canada	16	6.25 %
	Mexico	15	5.86 %
	Thailand	15	5.86 %
	Vietnam	14	5.47 %
	Qatar	14	5.47 %
	Australia	13	5.08 %
	Indonesia	11	4.30 %

**Table 1 (continued)**

Characteristics	Category	N	%
Given the chance, would you want to go back to work abroad?	Guam	8	3.13 %
	Morocco	7	2.73 %
	Hong Kong	6	2.34 %
	Cambodia	4	1.56 %
If yes, what country?	Yes	169	66.02 %
	No	87	33.98 %
Why this country?	Japan	39	23.08 %
	USA	28	16.57 %
	Canada	21	12.43 %
	Australia	19	11.24 %
	Singapore	15	8.88 %
	UAE	12	7.10 %
	Taiwan	8	4.73 %
	Thailand	7	4.14 %
	Vietnam	7	4.14 %
	Qatar	6	3.55 %
Why this country?	Mexico	5	2.96 %
	Indonesia	2	1.18 %
	Wants better career opportunities and advancement.	74	43.79 %
	Interested in earning more money than in the Philippines.	43	25.44 %
	Wants to travel more.	32	18.93 %
	Looking for a better living situation in this country.	14	8.28 %
	Interested in living where their family members are.	6	3.55 %

collection of data from Filipino engineers who are working or who worked abroad before. To contact responders, an online survey was delivered via Google Forms to several social media sites, including Facebook and Instagram. The survey, which employed a 5-point Likert Scale, was compliant with the Philippines' Data Privacy Act (Republic Act No. 10173), which required respondents to fill out and sign a permission form. Respondents who agreed would complete the survey form; those who disagreed would not.

A summarized tabular representation of the demographic characteristics presented in Table 1. Similar to Mediran et al.'s (2021) results, which investigated the intention of Filipino engineering students to work overseas, migration patterns show that a large proportion of engineering graduates, particularly males, are preferring to relocate in search of better employment possibilities. This tendency is consistent with larger Filipino migration patterns, as noted by Lomibao (2023), who discovered that migration is particularly prevalent among Filipinos aged 25 to 34. Furthermore, survey results suggest that most migrants (43.79 %) want better work chances and promotion, validating the notion that professional development is a fundamental motivator of migration. These data highlight how education and age-related factors contribute to the growing migration of Filipino engineers.

### 3.2. Questionnaire

This study's survey questionnaire is divided into two parts. The first section includes questions on the respondents' demographic information, and the second section assessed the various attributes using a five-point Likert scale with 1 indicating strongly disagree and 5 indicating the strongly agree. The survey had 29 adapted measure items (Ashforth & Mael, 1989; Carfora et al., 2019; Eisenberger & Cameron, 1996; Gumasing et al., 2022; Hackman & Oldham, 1976; Harzing, 2001; Kwak et al., 2020; Lin et al., 2017; Locke & Latham, 2002; Ong et al., 2022; Selmer & Luring, 2011; Soorani & Ahmadvand, 2019; Spector, 1997;

Yuan et al., 2015) that addressed seven latent variables: perceived behavioral control, subjective norm, attitude, behavioral intention, expectation, satisfaction, and confirmation (Supplementary material).

The survey questionnaire in the second half of the paper was modified from relevant research to represent the latent factors investigated in this study. After being examined by a psychometrician, a pre-test was conducted with 30 respondents to ensure clarity in the measure questions among experts, including any ambiguous sentences, overall reflection of factors and variables, and grammatical problems. After validating minor adjustments, the total Cronbach's alpha output of 0.902 indicated appropriate adapted measure items for assessment (Dash & Paul, 2021; Hair & Alamer, 2022). Moreover, the data first should be first normal (Hair et al., 2021) that the reliability and validity tests are within acceptable limits, the model fit is satisfactory, and subjective measurements are employed. It's explained that objective measures only need 150 respondents, while 250 is for subjective measures (Hair, 2010). With this, the Shapiro-Wilk Test showed normal results across replies (Hair et al., 2011), as shown in Table 2.

### 3.3. Structural equation modeling

Structural equation modeling (SEM) is a popular multivariate statistical method that employs components from factor and route analysis to investigate complicated interactions between known and unknown variables within a theoretical framework (Kline, 2016). Researchers can test the validity of their hypotheses by addressing direct and indirect effects simultaneously, correcting measurement errors, and examining the model's congruence with the data. Dash and Paul (2021) argued that once core frameworks are established, both covariance-based SEM (CB-SEM) and partial least squares SEM (PLS-SEM) are helpful. PLS-SEM appears as a more recent version of SEM, with advantages in its complete approach, mature development, and more sensitive analysis (Hair

& Alamer, 2022). While CB-SEM focuses on factor analysis, PLS-SEM offers a more holistic approach, considering the model's overall variance in relation to the responses supplied.

Dash and Paul (2021) said that this is a more sensitive analysis and is typically utilized for freshly constructed, expanded, or integrated models. Compared to CB-SEM, which requires more response, is often used for established framework adoption, and is primarily used to examine covariance connections (Kline, 2016), we chose to explore PLS-SEM, which is supported by previous research that have produced favorable outcomes utilizing PLS-SEM. Nonetheless, Dash and Paul (2021) investigated and concluded that any of the two forms of SEM might be employed, particularly for smaller frameworks such as the one used in the study.

Furthermore, representing the linear combination of indicators improves analysis. Hair and Alamer (2022) proposed a higher sample size for appropriateness in their rule-of-thumb talks, but later research has called this assumption into question. Recent research suggests that PLS-SEM may efficiently manage reduced sample sizes (Dash & Paul, 2021). PLS-SEM has gained popularity, especially in the social sciences, due to its sensitivity and complete measuring strategy. Given that the current investigation used an integrated TPB-ECT model, PLS-SEM was considered suitable. SEM's versatility provides specific benefits in studying complicated causal structures, particularly when measuring latent dimensions such as emotional behavior and attitude, which are difficult to define. Nonetheless, the intricacy of SEM necessitates careful consideration of model formulation, estimate, and assessment methods (Arminger et al., 2013). As a result, the current study conducted its analysis using Smart-PLS v3.0.

## 4. Results

### 4.1. The result of initial SEM

Fig. 2 depicts the initial SEM for determining the elements that influence the desire of Filipino engineering professionals to work abroad. As suggested by comparable studies (Arminger et al., 2013; Hair, 2010; Hair & Alamer, 2022), factor loadings  $<0.70$  should be discarded as unimportant measurements of the latent variable. Accordingly, relationships with  $p$ -values larger than 0.05 are considered not significant (Hair, 2010). Therefore, these could be deleted to improve the model fit of the SEM. The correlations with greater  $p$ -values than the threshold set are denoted by broken lines.

Table 3 displays the descriptive statistics of responses, along with the initial and final models. According to Dash and Paul (2021), once the threshold is attained, all measure items are considered acceptable. In agreement, it was observed that the last factor loading of subjective norm, second factor loading of PCB, and the last factor loading of EX were deleted because the association was deemed insignificant.

To assess convergent validity, the average variance extracted (AVE) and composite reliability (CR) were determined, along with Cronbach's alpha. Table 4 shows that all constructs in the model meet the required levels for validity and reliability (Arminger et al., 2013; Hair et al., 2021; Hair & Alamer, 2022).

To show, discriminant validity was assessed using the heterotrait-monotrait correlation ratio (HTMT) and the Fornell-Larcker criteria (FLC) to assess the measurement model and the relationship between each variable (Arminger et al., 2013; Henseler et al., 2014). According to Hair (2010), the FLC must have diagonal values that are greater than the horizontal and vertical values in order to be considered acceptable. According to Kline (2016), discriminant validity is demonstrated by an HTMT  $<0.85$ . As demonstrated in Tables 5 and 6, the values are within the specified ranges, suggesting acceptable reliability and discriminant validity.

**Table 2**  
Normality test.

Variable	Kurtosis	Skewness	Shapiro-Wilk
PBC1	2.030	-1.367	-0.673
PBC2	0.363	-0.608	-1.675
PBC3	1.661	-1.186	-0.714
PBC4	0.438	-0.765	-1.747
PBC5	1.660	-1.047	-0.631
SN1	-0.008	-0.436	54.500
SN2	0.679	-0.762	-1.122
SN3	-0.420	-0.421	1.002
SN4	-0.776	-0.029	0.037
AT1	0.557	-0.895	-1.607
AT2	1.732	-1.130	-0.652
AT3	4.331	-1.787	-0.413
AT4	3.048	-1.481	-0.486
AT5	1.098	-1.105	-1.006
BI1	1.745	-1.104	-0.633
BI2	1.575	-1.199	-0.761
BI3	1.565	-1.094	-0.699
BI4	0.944	-0.779	-0.825
IM1	2.633	-1.298	-0.493
IM2	2.046	-1.347	-0.658
IM3	1.497	-1.119	-0.747
EM1	2.032	-1.218	-0.599
EM2	2.032	-1.218	-0.599
EM3	0.866	-0.792	-0.915
EXP1	2.808	-1.287	-0.458
EXP2	2.474	-1.365	-0.552
EXP3	3.092	-1.564	-0.506
EXP4	-0.827	-0.708	0.856
SAT1	2.676	-1.417	-0.530
SAT2	2.048	-1.312	-0.641
SAT3	2.163	-1.255	-0.580
CON1	2.385	-1.390	-0.583
CON2	1.191	-1.048	-0.880
CON3	1.337	-1.094	-0.818
CON4	2.854	-1.377	-0.482

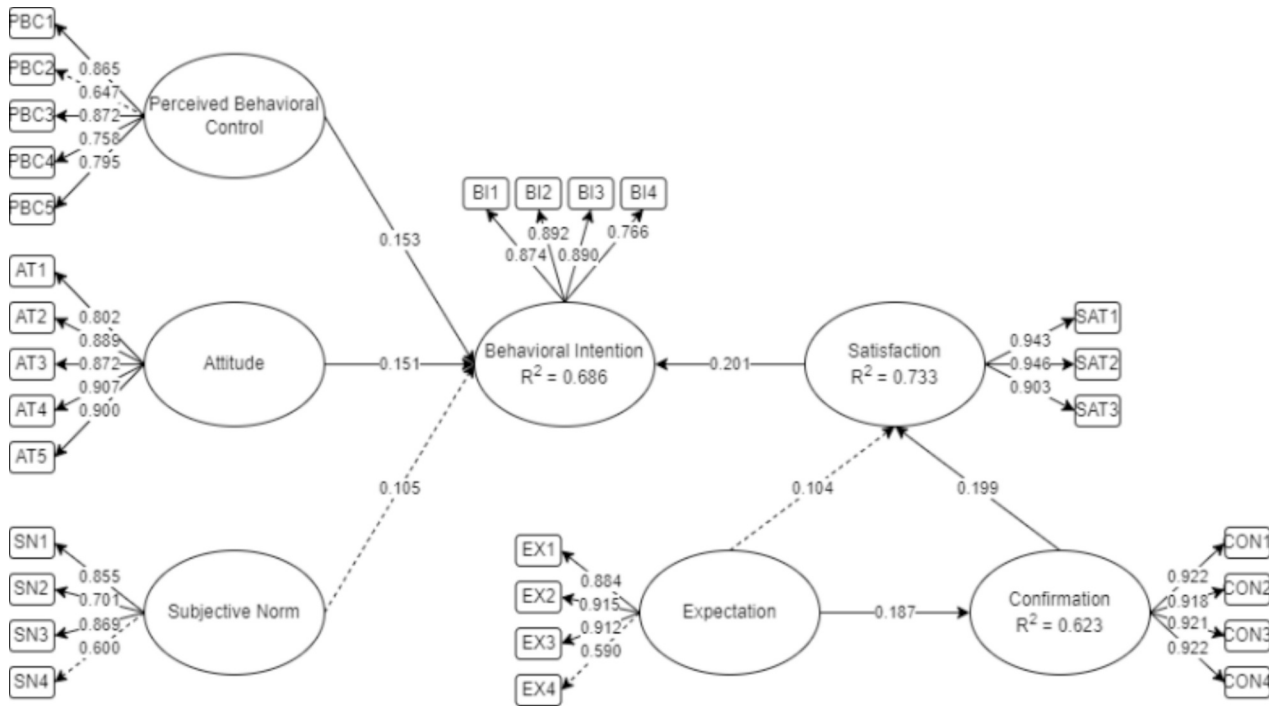


Fig. 2. Initial SEM model.

**Table 3**  
Statistical analysis of indicators.

Variables	Item	Mean	SD	Factor loading	
				Initial	Final
Perceived behavioral control	PBC1	4.070	0.974	0.865	0.868
	PBC2	3.648	1.054	0.647	–
	PBC3	4.027	0.941	0.872	0.884
	PBC4	3.785	0.979	0.758	0.761
	PBC5	4.094	0.843	0.795	0.816
Attitude	AT1	3.840	1.020	0.802	0.802
	AT2	3.949	0.915	0.889	0.889
	AT3	4.258	0.868	0.872	0.872
	AT4	4.137	0.889	0.907	0.907
	AT5	4.012	0.986	0.900	0.900
Subjective norm	SN1	3.555	0.999	0.855	0.866
	SN2	3.883	1.013	0.701	0.715
	SN3	3.406	1.027	0.869	0.872
	SN4	2.945	1.110	0.600	–
Behavioral intention	BI1	4.043	0.885	0.874	0.873
	BI2	3.949	0.993	0.892	0.892
	BI3	3.969	0.926	0.890	0.890
	BI4	3.875	0.893	0.766	0.766
	EX1	3.953	0.851	0.884	0.887
Expectation	EX2	4.102	0.909	0.915	0.930
	EX3	4.207	0.906	0.912	0.929
	EX4	3.598	1.064	0.590	–
Confirmation	CON1	4.094	0.922	0.922	0.922
	CON2	3.926	0.967	0.918	0.918
	CON3	3.953	0.963	0.921	0.921
	CON4	3.891	0.886	0.922	0.922
Satisfaction	SAT1	4.004	0.916	0.943	0.943
	SAT2	4.000	0.952	0.946	0.946
	SAT3	4.047	0.909	0.903	0.904

#### 4.2. Model fit analysis

To validate the suggested model, a model fit assessment was performed. Table 7 shows that all parameter estimates exceeded the stated minimal threshold value, demonstrating the model's acceptance according to the recommendations.

**Table 4**  
Convergent validity.

Variables	Cronbach's alpha	CR	AVE
Attitude	0.923	0.942	0.765
Behavioral intention	0.878	0.917	0.734
Confirmation	0.940	0.957	0.847
Expectation	0.903	0.939	0.838
Perceived behavioral control	0.854	0.901	0.695
Satisfaction	0.923	0.951	0.867

**Table 5**  
Fornell-Larcker criterion.

Variable	AT	BI	CON	EXP	PBC	SAT
Attitude	0.875					
Behavioral intention	0.797	0.857				
Confirmation	0.724	0.659	0.921			
Expectation	0.756	0.641	0.790	0.915		
Perceived behavioral control	0.731	0.704	0.724	0.692	0.834	
Satisfaction	0.757	0.742	0.805	0.760	0.748	0.931

**Table 6**  
Heterotrait–monotrait ratio.

Variable	AT	BI	CON	EXP	PBC	SAT
Attitude						
Behavioral intention	0.835					
Confirmation	0.778	0.728				
Expectation	0.830	0.722	0.827			
Perceived behavioral control	0.812	0.800	0.810	0.784		
Satisfaction	0.818	0.822	0.815	0.832	0.831	

#### 4.3. The result of the final SEM

The final SEM results highlight numerous key characteristics that influence the desire of Filipino engineering professionals to work



**Table 7**

Model fit.

Goodness of fit measures	Parameter estimates	Minimum cutoff	Recommended by
SRMR	0.058	<0.08	(Zhou, 2021)
Chi-square	2.326	<5.00	(Mamman et al., 2016)
NFI	0.913	>0.90	(Van Dalen & Henkens, 2008)

abroad, as shown in Table 8. Confirmation to satisfaction had the highest influence ( $\beta = 0.224, p < 0.001$ ), followed by expectation to confirmation ( $\beta = 0.19, p < 0.001$ ). Moreover, attitude to behavioral intention had a substantial but slightly lesser effect ( $\beta = 0.166, p < 0.001$ ). Furthermore, satisfaction to behavioral intention favorably influences the desire of Filipino engineering professionals to work abroad ( $\beta = 0.205, p = 0.013$ ) and perceived behavioral control to behavioral intention also favorably influences the desire of Filipino engineering professionals to work abroad ( $\beta = 0.165, p = 0.028$ ). On the flip side, expectation to satisfaction ( $\beta = 0.104, p = 0.057$ ) and subjective norm to behavioral intention ( $\beta = 0.105, p = 0.159$ ) had no significant effect on the desire of Filipino engineering professionals to work abroad. On the other hand, the indirect effects of confirmation on BI ( $\beta = 0.131, p < 0.001$ ) is higher than the professional's expectation ( $\beta = 0.095, p = 0.008$ ). This presents an overall impact on the total effects, wherein confirmation ( $\beta = 0.221, p < 0.001$ ) and expectations ( $\beta = 0.163, p < 0.001$ ) affected BI.

Fig. 3 shows the final SEM, with beta coefficients and  $R^2$  values generated to evaluate the hypothesis model. The model assigns 74.1 % of the variation to satisfaction, 69.2 % to behavioral intention, and 62.3 % to confirmation. This shows that the model appropriately explains or predicts the desire of Filipino engineering professionals to work abroad if their values exceed the 20 % criterion (Arminger et al., 2013).

## 5. Discussion and implications

Among Filipino engineering professionals interested in working overseas, satisfaction was the most significant latent variable having a direct influence on behavioral intention. The final SEM findings revealed that satisfaction significantly affected behavioral intention ( $\beta = 0.205, p = 0.013$ ). Expected future satisfaction with international

**Table 8**

Summarized results.

Direct effects				
Hypothesis	Relationship	Beta	p-Value	Decision
1	PBC → BI	0.165	0.028	Accept
2	AT → BI	0.166	<0.001	Accept
3	SN → BI	0.105	0.159	Reject
4	SAT → BI	0.205	0.013	Accept
5	CON → SAT	0.224	<0.001	Accept
6	EXP → SAT	0.104	0.057	Reject
7	EXP → CON	0.190	<0.001	Accept

Indirect effects			
Relationship	Beta	p-Value	Decision
EXP → BI	0.095	0.008	Accept
CON → BI	0.131	<0.001	Accept

Total effects			
Relationship	Beta	p-Value	Decision
EXP → BI	0.163	<0.001	Accept
CON → BI	0.221	<0.001	Accept

employment, finding meaningful jobs, and adjusting to the work environment all had a role in this outcome. This substantial relationship shows that when professionals are satisfied with their jobs, they are more inclined to pursue international careers. Inclined among Filipino engineers, most of which could be said that not all are satisfied, which prompt the migration. Relating to the study by Moulik and Mazumdar (2012), they discovered that expatriate satisfaction among Indian IT professionals in the United States strengthened their intention to stay. Bonache (2005) also found that expatriates with better work satisfaction were more willing to prolong their assignments abroad. These findings are consistent with the study's findings, suggesting that when expatriates are satisfied whether through meaningful employment, job security, or workplace adaptation they become more committed to their overseas careers.

However, other research indicates that satisfaction does not necessarily result in long-term expatriate retention. Tung (2008) stated that career-related problems, such as unmet expectations, might lower work satisfaction and influence an expatriate's decision to stay overseas. This contrasts with the study's findings, which demonstrate pleasure as a key motivator of behavioral intention, most likely because the professionals polled had previously validated their expectations, reducing discontent. Similarly, Caligiuri and Lazarova (2002) stressed the need for social support in expatriate success, implying that satisfaction may not be sufficient if professionals feel alienated. Unlike previous studies, this study discovered a substantial direct relationship between satisfaction and behavioral intention, presumably because Filipino engineering professionals prioritize workplace satisfaction above social integration when making career selections. These discrepancies underscore the need of firms addressing both satisfaction and external variables like career progression and social support to enhance expatriate retention.

Attitude is the second-most significant latent variable with a direct influence on behavioral intention among Filipino engineering professionals interested in working overseas, behind only satisfaction. The SEM findings showed a significant correlation between attitude and behavioral intention ( $\beta = 0.166, p < 0.001$ ). Measured items such as Filipinos seeing international employment as a path to professional stability, acknowledging its benefits, and thinking it vital for future family security demonstrates how positive attitude impacts the desire to work abroad. This result demonstrates that when professionals perceive employment abroad as beneficial, they are more inclined to pursue it. This is consistent with research such as Yurtkoru et al. (2017), which investigated how cognitive cultural intelligence and job-related attitudes impact inclinations to work overseas. Chen et al. (2022) discovered that good opinions of international careers influence foreign internship and job opportunities. These studies support the notion that professionals with positive attitudes on working abroad are more motivated to accept overseas assignments, emphasizing the importance of attitude in career decision-making.

However, some evidence indicates that attitude alone cannot fully explain expatriate employment decisions. Tharenou and Caulfield (2010) investigated how work satisfaction and personal characteristics impact repatriation, concluding that while good attitudes are important, they do not ensure expatriate retention or success. This contradicts the study's findings, which reveal a clear and substantial relationship between attitude and behavioral intention, probably because Filipino engineering professionals prioritize job stability and financial security when establishing their intents. Similarly, Zhang and Oczkowski (2016) highlighted that adjustment tactics are crucial to expatriate results, underlining that optimistic attitudes alone may not be sufficient. The study's findings indicate that Filipino professionals may be more motivated by their pre-existing favorable attitudes regarding foreign employment, however in other situations, external support mechanisms are required to reinforce these attitudes. These distinctions underscore the significance of not just cultivating good attitudes, but also establishing strong support structures, to ensure long-term expat success.

The latent variable perceived behavioral control had the greatest

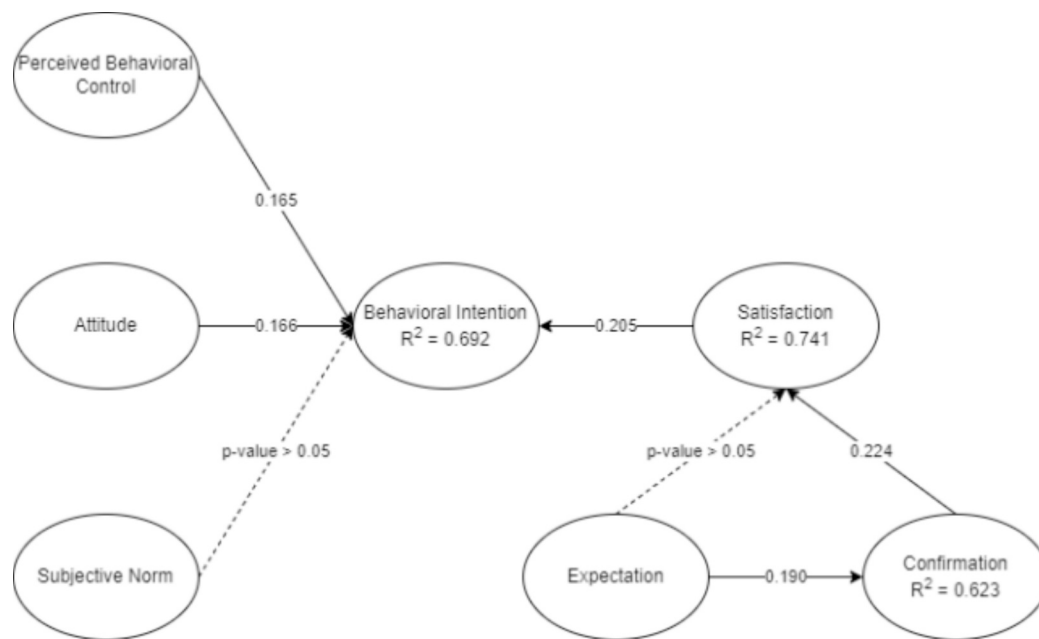


Fig. 3. Final SEM model.

direct influence on behavioral intention among Filipino engineering professionals interested in working overseas, followed by satisfaction and attitude. The SEM findings corroborated the connection ( $\beta = 0.165$ ,  $p = 0.028$ ). Measured elements such as Filipinos' personal desire to work abroad, trust in job stability, decision-making control, and availability to critical resources demonstrate how perceived control influences the intention to pursue foreign employment. However, the item about working overseas to help society was shown to be minor, implying that practical issues like job stability and personal career advancement took precedence over humanitarian objectives. This conclusion is consistent with Weerasinghe and Kumar (2015), who looked at university students' intentions to work overseas, and Engle et al. (2015), who used the idea of planned behavior to expatriate intents. These findings support the notion that when people believe they have the required finances and control over their actions, they are more likely to develop strong desires to work abroad. However, not all areas of perceived control are equally important, since certain factors may have a greater influence on career selections than others.

In contrast, other research indicates that perceived behavioral control alone is insufficient to influence expatriate employment choices. Caligiuri and Bonache (2016) discussed how global mobility issues and organizational variables might affect expatriates' efficacy and decisions, implying that elements beyond perceived control, such as corporate regulations and mobility limits, have a role. Similarly, Kraimer et al. (2001) underlined the relevance of organizational support and expatriate adjustment, claiming that while perceived control impacts career choices, it may be undermined by external variables such as social support and adaptation challenges. These findings contradict the study's findings, which suggest that perceived control strongly influences behavioral intention, probably because Filipino engineering professionals value personal agency and stability while making career decisions. In other situations, external support networks and adaptation mechanisms may be more important, diminishing the solitary influence of perceived control. This distinction demonstrates that, while perceived control is a powerful motivation, successful expatriation also requires broader organizational and societal support systems.

The latent variable of subjective norm had no significant effect on behavioral intention among Filipino engineering professionals interested in working abroad. The final SEM results confirmed this insignificance ( $\beta = 0.105$ ,  $p = 0.159$ ), indicating that social expectations

regarding Filipinos working overseas do not strongly influence the decision to pursue international employment. Additionally, the item related to feeling socially pressured to work abroad was found to be insignificant due to a low factor loading. One possible explanation for this result is that career decisions are increasingly driven by Filipinos' personal goals and practical factors rather than societal expectations. This shows that external opinions or social factors among Filipinos may be less important in influencing expatriation intentions than internal reasons, financial security, or job growth prospects. Similar results were obtained by Ho et al. (2016) and Ho (2015), who investigated variables influencing expatriation and re-expatriation intentions. According to their findings, subjective norms may have less impact on professional decisions since people value personal agency and rational decision-making more than external constraints.

However, other study indicates that subjective norms may still play an important role in expatriation under specific settings. Sparrow et al. (2016) claimed that cultural and organizational norms might have a significant impact on expatriate decisions, particularly in terms of HR rules and employee expectations. Similarly, Suutari and Brewster (2000) discovered that subjective norms might promote self-initiated expatriation, when people are pushed to pursue overseas possibilities due to external pressures or societal expectations. These findings contradict the study's conclusions, which show that subjective norms are not a significant issue for Filipino engineering professionals. One possible explanation for this disparity is that in other circumstances, collectivist societies or strong organizational pressures may result in a stronger dependence on social expectations when selecting career choices. In contrast, Filipino engineers may place a greater emphasis on personal desire and financial incentives than on external validation. This implies that, while subjective norms can be significant in some situations, their impact on expatriation decisions varies according to cultural, organizational, and individual circumstances.

The latent variable confirmation was discovered to have no direct influence on the behavioral intention of Filipino engineering professionals interested in working overseas. Instead, confirmation affected satisfaction first, followed by behavioral intention. Unlike confirmation, expectation was not directly associated with contentment, suggesting that just expecting working overseas does not always result in increased pleasure. The final SEM findings indicated that confirmation had the greatest impact on behavioral intention which is via the numbers from

the total effects ( $\beta = 0.221, p < 0.001$ ). This significant association shows that when Filipinos receive positive feedback, perceive alignment with their professional objectives, overcome challenges, and meet performance standards, they feel more satisfied, which boosts their desire to work overseas. This outcome is similar with Harvey et al. (2007) and Miluwi (2011), both of whom stressed the relevance of realistic work previews and expectation management in boosting expatriate happiness and performance. Their research shows that when professionals' initial expectations are realized, their overall satisfaction rises, and they become more dedicated to foreign employment.

However, conflicting research indicates that confirmation alone may not be sufficient to assure expatriate happiness and long-term commitment. Froese and Peltokorpi (2011) discovered that cultural distance had a detrimental impact on expatriate job satisfaction, suggesting that aligning career expectations may not adequately meet the constraints of international employment. Similarly, Shaffer and Harrison (2001) and Haslberger and Brewster (2008) stressed the importance of family dynamics and marital adjustment, emphasizing that personal and family well-being are essential for expatriate satisfaction. These findings suggest that, while confirmation has a significant impact on Filipinos' satisfaction and subsequent behavioral intention, other elements such as cultural adaptation, social support, and family ties must also be considered to ensure a happy expatriate experience. One explains why confirmation was important in one study but not in others, since various expatriate groups may encounter extra hurdles that affect their overall happiness and career decisions.

The latent variable expectation was discovered to have no direct influence on the behavioral intention of Filipino engineering professionals interested in working overseas. Instead, expectation affected confirmation, which led to satisfaction and, eventually, behavioral intention. The final SEM findings corroborated this association ( $\beta = 0.163, p < 0.001$ ), indicating that reasonable performance expectations, anticipated personal growth, and better cross-cultural abilities contribute to confirmation. However, the direct effect of expectation on satisfaction was insignificant ( $\beta = 0.104, p = 0.057$ ), demonstrating that just having expectations does not always result in better satisfaction. This is consistent with Tharenou (2003) and Stroh et al. (1998), who discovered that when expectations match actual experiences, confirmation is greatly improved, improving happiness and drive to work overseas. These findings indicate that Filipinos' expectations impact on perceptions of reality, but only when validated by actual experiences can they lead to long-term professional satisfaction.

However, other research implies that expectation alone might not adequately describe the expatriate experience. Luring and Selmer (2010) contended that spousal support is critical to expatriate employment performance, meaning that focusing entirely on professional expectations may result in frustration if personal factors are disregarded. Similarly, Takeuchi et al. (2002) discovered that spouse and family adjustment had a substantial influence on expatriate results, demonstrating that professional happiness is insufficient if family members struggle to adapt. These findings demonstrate that, while expectation has an essential role in influencing confirmation and satisfaction, long-term expatriate success necessitates additional support systems such as family well-being and adaptation techniques. It explains why expectation among Filipinos was important in one study but not in others, since various expatriate communities may prioritize criteria other than professional expectations when assessing job satisfaction and willingness to stay overseas.

Overall, these findings shed fresh light on the variables affecting Filipino engineers' decisions to work overseas. The findings suggest that while confirmation does not have a direct effect on behavioral intention, its overall effects have the biggest influence on migratory decisions based compared to the other variables. This emphasizes the importance of expectation alignment in generating professional happiness, which in turn influences the desire to work abroad. Following confirmation, satisfaction, attitude, and perceived behavioral control are the three

latent factors that have a direct impact on behavioral intention, highlighting how pleasant job experiences, personal confidence, and favorable perceptions influence migration decisions.

Expectation, while not directly influencing behavioral intention, has a large influence on confirmation and pleasure. This shows that simply anticipating job advancement overseas is insufficient; rather, meeting those expectations reinforces the desire to relocate. Finally, subjective norm was shown to have no significant influence on behavioral intention, supporting the notion that Filipino engineers prioritize personal ambitions and practical concerns above social pressure when making professional selections.

These findings advance migration research by proving the usefulness of the TPB-ECT model in analyzing migration behavior. While the model accurately predicts important decision-making components, the insignificance of subjective norms indicates that cultural background and personal upbringing influence job selections differently across nations. Filipino engineers may prioritize personal development and work stability over societal expectations, but professionals from other cultures may place a higher value on social impact. This emphasizes the need to take cultural context into account when implementing migration models in a variety of situations.

In practice, the research emphasizes the need of career development programs, expectation management, and confidence-building activities to help engineers advance their careers. Employers looking to retain engineering talent should understand how cultural variables affect work satisfaction and career expectations. Organizations may build a work climate that matches with engineers' ambitions while reducing talent loss by providing competitive opportunities, encouraging mentorship, and assuring career security.

### 5.1. Theoretical implications

The integrated theoretical model used in this study, which is based on the Extended Theory of Planned Behavior (TPB) and Expectation-Confirmation Theory (ECT), makes several important contributions to the fields of industrial engineering and human behavior, particularly in understanding the factors that influence Filipino engineering professionals' desire to work overseas. This comprehensive approach enables a more in-depth investigation of the cognitive processes that underpin the decision-making behaviors of professionals considering international assignments. The model emphasizes the importance of confirmation in shaping satisfaction, which influences the desire to work overseas. This conclusion emphasizes the necessity of controlling and meeting expatriates' expectations in order to increase their overall job satisfaction and commitment to overseas employment.

The study also showed how intricate interactions between various variables, such as attitudes, perceived behavioral control, and subjective norms, influence behavioral intentions. By explaining these relationships, the model offers a more nuanced view of the varied nature of engineering professionals' career decisions. Furthermore, the theoretical model can help firms build stronger support systems for their expatriate personnel. It could therefore be posited that understanding the factors that have a significant impact on satisfaction and behavioral intentions allows organizations to create targeted interventions to align expectations with actual experiences, improve perceived control over career decisions, and foster positive attitudes toward international assignments. Furthermore, this study broadens the application of ECT beyond its usual use in consumer behavior, into the area of career decision-making and professional mobility, providing a new viewpoint on how ECT can be used in a variety of settings.

### 5.2. Practical and managerial implications

This study has important consequences for firms that use or plan to hire Filipino engineering experts abroad. Since confirmation has a significant influence on satisfaction, which drives the ambition to work

abroad, managers should present realistic job previews and set clear expectations for expatriates. Ensuring that employment experience is consistent with expectations may increase satisfaction, resulting in a more engaged staff. Job rotation and expansion are two practical techniques that can help engineers achieve fulfillment and advance in their careers. Furthermore, providing frequent assistance and positive comments may enhance expatriates' confidence and dedication, increasing their chances of success.

Organizations may improve expatriate retention by addressing perceived behavioral control and attitudes toward working overseas. Employees feel empowered and confident in their judgments when they are given the proper tools, training, and opportunity for advancement. Recognizing the cultural and social norms that influence employment choices can lead to a more supportive workplace. Policymakers should prioritize clear channels and resources for foreign employment, while also encouraging favorable attitudes and helpful subjective norms among engineering communities. Managing expectations and guaranteeing their confirmation after migration may boost satisfaction, resulting in higher retention and long-term performance in international markets.

### 5.3. Limitations and future direction

While this study provides useful insights into the elements that influence Filipino engineering professionals' desire to work abroad, there are numerous shortcomings that must be addressed. The most major restriction is the limited sample size, which may limit the generalizability of the results. With a bigger and more diverse respondent pool, future research could validate and expand on the findings of this study. Furthermore, the study focuses exclusively on Filipino engineering experts, thus the findings may not be completely applicable to people from other nations or disciplines. A bigger sample of respondents from various cultural and professional backgrounds could provide a more complete picture of the factors driving expatriation decisions.

Future research should include longitudinal studies that follow changes in expectancies, satisfaction, and behavioral intentions over time. This method would provide more detailed insights into how these parameters evolve as professionals get more experience in international employment. Furthermore, investigating other potential moderating variables such as personality traits, corporate culture, and family considerations may provide a more detailed picture of the decision-making process associated with working abroad. By resolving these constraints and broadening the area of research, future studies can build on the integrated theoretical model offered in this study, giving more robust and broadly applicable insights into the expatriation intentions of engineering professionals and other workforce segments. Lastly, qualitative approaches like group interviews or one-on-one interviews may be conducted to determine other significant factors not covered by the framework used in the study.

## 6. Conclusion

The goal of this study was to better understand the elements that impact Filipino engineering professionals' desire to work overseas by applying an integrated theoretical model based on the Extended Theory of Planned Behavior (TPB) and Expectation-Confirmation Theory (ECT). The findings underlined that confirmation plays a crucial role in shaping satisfaction, which in turn significantly influences behavioral intention, while expectation does not directly affect satisfaction. Additionally, the total effects found that confirmation had the greatest influence on behavioral intention, followed by satisfaction, attitude, and perceived behavioral control. Expectation, while not having a direct effect on behavioral intention, still plays a role through its influence on confirmation. Meanwhile, subjective norm was found to have no significant direct effect on behavioral intention.

This study delves deeper into the complicated links between

attitudes, perceived behavioral control, and subjective norms that influence the decision-making process of Filipino engineering professionals choosing abroad labor. By including ECT into the TPB paradigm, this study provides a more complete explanation of the cognitive mechanisms behind job decisions. Beyond its theoretical contributions, the study has practical implications for firms that want to increase expatriate assistance and labor retention.

These findings provide important management insights for developing the workforce and organizational culture of engineering professionals in the Philippines. Organizations may increase job satisfaction and commitment to local employment by matching expectations with real work experience. This study further expands the use of ECT beyond consumer behavior, highlighting its importance in career decision-making and professional advancement. Overall, this study makes substantial contributions to the fields of industrial engineering and human behavior, establishing a solid foundation for future research into expatriation intentions in a variety of scenarios as expansion, not only limiting to the professional engineers migrating abroad.

### CRediT authorship contribution statement

**Rex Revian A. Guste:** Writing – review & editing, Writing – original draft, Visualization, Validation, Software, Resources, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Ardvin Kester S. Ong:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **John Francis T. Diaz:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Investigation, Formal analysis, Data curation, Conceptualization. **Maela Madel L. Cahigas:** Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization. **Ma. Janice J. Gumasing:** Writing – review & editing, Visualization, Validation, Supervision, Software, Project administration, Methodology, Investigation, Formal analysis, Conceptualization.

### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.actpsy.2025.104913>.

### Data availability

The datasets generated during and/or analyzed during the current study are not publicly available due privacy request of the respondents but are available from the corresponding author on reasonable request.

### References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32(4), 665–683. <https://doi.org/10.1111/j.1559-1816.2002.tb00236.x>
- Ajzen, I. (2020, June). The theory of planned behavior: Frequently asked questions. *Health Psychology Bulletin*, 4(1), 1–10. <https://onlinelibrary.wiley.com/doi/abs/10.1002/hbe2.195>
- Almendral, A., & Morales, H. R. (2018, December). 10 million Filipinos endure hardship abroad as overseas workers. National Geographic. <https://www.nationalgeographic.com>



- com/magazine/article/filipino-workers-return-from-overseas-philippines-celebrate-s.
- Ambak, K., Kasvar, K. K., Daniel, B. D., Prasetyo, J., & Abd Ghani, A. R. (2016). Behavioral intention to use public transport based on theory of planned behavior. In , Vol. 47. *MATEC web of conferences* (p. 03008). EDP Sciences.
- Anderson, B., Poeschel, F., & Ruhs, M. (2021). Rethinking labour migration: Covid-19, essential work, and systemic resilience. *Comparative Migration Studies*, 9(1). <https://doi.org/10.1186/s40878-021-00252-2>
- Anderson, J. E. (2011). The gravity model. *Annual Review of Economics*, 3(1), 133–160. <https://doi.org/10.1146/annurev-economics-111809-125114>
- Arminger, G., Clogg, C. C., & Sobel, M. E. (Eds.). (2013). *Handbook of statistical modeling for the social and behavioral sciences*. Springer Science & Business Media.
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14(1), 20–39.
- Asis, M. M. B. (2013). Looking after the left-behind families of Overseas Filipino Workers: The Philippine experience. In *Family, migration and dignity*. <https://doi.org/10.5339/qproc.2013.fmd.4>
- Assfaw, A. K., & Minaye, A. (2022). Explaining migration intention from selected psychosocial variables in South Wollo, Ethiopia. *Frontiers in Sociology*, 7, Article 960203.
- Baruch, Y., Budhwar, P. S., & Khatri, N. (2007). Brain drain: Inclination to stay abroad after studies. *Journal of World Business*, 42(1), 99–112. <https://doi.org/10.1016/j.jwb.2006.11.004>
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.
- Bhattacharjee, A. (2001). Understanding information systems continuance: An expectation-confirmation model. *MIS Quarterly*, 25(3), 351–370.
- Bhattacharjee, A., & Lin, C. P. (2010). A unified model of IT continuance: Three complementary perspectives and crossover effects. *European Journal of Information Systems*, 19(3), 264–279.
- Birdseye, M. G., & Hill, J. S. (1995). Individual, organizational/work and environmental influences on expatriate turnover tendencies: An empirical study. *Journal of International Business Studies*, 26, 787–813.
- Boies, K., & Rothstein, M. G. (2002). Managers' interest in international assignments: The role of work and career satisfaction. *International Journal of Intercultural Relations*, 26(3), 233–253.
- Bonache, J. (2005). Job satisfaction among expatriates, repatriates and domestic employees: The perceived impact of international assignments on work-related variables. *Personnel Review*, 34(1), 110–124.
- Borjas, G. J. (1989). Economic theory and international migration. *International Migration Review*, 23(3), 457–485. <https://doi.org/10.2307/2546424>
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research*. Guilford Publications.
- Cai, H., & Wang, J. (2008). Factors influencing the migration intentions of rural workers in the Pearl River Delta. *Social Sciences in China*, 29(3), 157–171.
- Caligiuri, P., & Bonache, J. (2016). Evolving and enduring challenges in global mobility. *Journal of World Business*, 51(1), 127–141.
- Caligiuri, P., & Lazarova, M. (2002). A model for the influence of social interaction and social support on female expatriates' cross-cultural adjustment. *International Journal of Human Resource Management*, 15(5), 761–772.
- Carfora, V., Cavallo, C., Caso, D., Del Giudice, T., De Devitiis, B., Viscecchia, R., Nardone, G., & Cicia, G. (2019). Explaining consumer purchase behavior for organic milk: Including trust and green self-identity within the theory of planned behavior. *Food Quality and Preference*, 76, 1–9. <https://doi.org/10.1016/j.foodqual.2019.03.006>
- Cenas, P. V., Patacsil, F. F., & Fernandez, M. M. (2020, February 1). Exploratory analysis of factors influencing engineers to teach at the Philippine State Universities in Ilocos Region. *Universal Journal of Educational Research*, 8(2), 672–677. [https://www.hrpub.org/journals/article\\_info.php?aid=8823](https://www.hrpub.org/journals/article_info.php?aid=8823)
- Chen, J., Jaafar, N., & Sin, K. Y. (2022). Factors affecting overseas internship, employment and further education under the background of "Belt and Road Initiative" - A TPB model analysis. *International Journal of Business and Society*, 23(3), 1753–1770.
- Chen, Z., & Fan, X. (2022). Intention and perceived control: International migrants' assimilation in China. *Journal of International Migration and Integration*, 23(4), 2075–2100.
- Chiswick, B. R. (1999). Are immigrants favorably self-selected? *The American Economic Review*, 89(2), 181–185. <https://doi.org/10.1257/aer.89.2.181>
- Cho, Y., Margolis, D., Newhouse, D., & Robalino, D. (2012). *Labor markets in low- and middle-income countries: Trends and implications for social protection and labor policies*. The World Bank.
- Christou, A., & Kofman, E. (2022, March). Gender and migration: An introduction. In *Gender and migration: A gender-sensitive approach to migration dynamics* (pp. 1–22). Springer. [https://link.springer.com/chapter/10.1007/978-3-030-91971-9\\_1](https://link.springer.com/chapter/10.1007/978-3-030-91971-9_1)
- Conner, M., & Armitage, C. J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology*, 28(15), 1429–1464.
- Dash, G., & Paul, J. (2021). CB-SEM vs PLS-SEM methods for research in social sciences and technology forecasting. *Technological Forecasting and Social Change*, 173, Article 121092.
- De Haas, H. (2010). Migration and development: A theoretical perspective. *International Migration Review*, 44(1), 227–264. <https://doi.org/10.1111/j.1747-7379.2009.00804.x>
- Debonneville, J. (2021). An organizational approach to the Philippine migration industry: Recruiting, matching and tailoring migrant domestic workers. *Comparative Migration Studies*, 9(1), 12. <https://doi.org/10.1186/s40878-020-00220-2>
- Docquier, F., & Rapoport, H. (2012). Globalization, brain drain, and development. *Journal of Economic Literature*, 50(3), 681–730. <https://doi.org/10.1257/jel.50.3.681>
- Eisenberger, R., & Cameron, J. (1996). Detrimental effects of reward: Reality or myth? *American Psychologist*, 51(11), 1153–1166.
- Engle, R. L., Schlögel, C., Dimitriadis, N., Tatoglu, E., & Ljubica, J. (2015). The intention to become an expatriate: A multinational application of the theory of planned behaviour. *European Journal of International Management*, 9(1), 108–137.
- Espiritu, Y. L. (2005, May 31). Gender, migration, and work. *Open Edition Journals*, 21(1), 55–75. <https://journals.openedition.org/remi/2343?lang=en>
- Fischer, N. L. (2012). *Pre-and post-migration attitudes among Ghanaian international students living in the United States: A study of acculturation and psychological well-being*. Virginia Commonwealth University.
- Froese, F. J., & Peltokorpi, V. (2011). Cultural distance and expatriate job satisfaction. *International Journal of Intercultural Relations*, 35(1), 49–60.
- Fu, X., Zhang, J., & Chan, F. T. S. (2018). Determinants of loyalty to public transit: A model integrating satisfaction-loyalty theory and expectation-confirmation theory. *Transportation Research Part A: Policy and Practice*, 113, 476–490. <https://doi.org/10.1016/j.tra.2018.05.012>
- Gumasing, M. J., Prasetyo, Y. T., Persada, S. F., Ong, A. K., Young, M. N., Nadlifatan, R., & Redi, A. A. (2022). Using online grocery applications during the COVID-19 pandemic: Their relationship with open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(2), 93. <https://doi.org/10.3390/joitmc8020093>
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16(2), 250–279.
- Hair, J. F. (2010). *Multivariate data analysis: A global perspective*. Pearson.
- Hair, J. F., & Alamer, A. (2022). Partial least squares structural equation modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, 1(3), Article 100027.
- Hair, J. F., Hult, G. T., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R. In Classroom companion: Business*. Berlin/Heidelberg, Germany: Springer.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152.
- Ham, M., Jeger, M., & Frajman Ivković, A. (2015). The role of subjective norms in forming the intention to purchase green food. *Economic Research-Ekonomska Istraživanja*, 28(1), 738–748. <https://doi.org/10.1080/1331677X.2015.1083875>
- Harris, J. R., & Todaro, M. P. (1970). Migration, unemployment and development: A two-sector analysis. *American Economic Review*, 60(1), 126–142.
- Harvey, M., & Buckley, M. R. (1997). The role of realistic job previews and expectation-lowering procedures for expatriate managers. *Journal of Applied Psychology*, 82(3), 360–372.
- Harvey, M. G., Buckley, M. R., & Novicevic, M. M. (2007). The role of realistic job previews and expectation lowering procedures for expatriate managers. *Journal of Diversity Management (JDM)*, 2(3), 13–22.
- Harzing, A. W. (2001). An analysis of the functions of international transfer of managers in MNCs. *Employee Relations*, 23(6), 469–490.
- Haslberger, A., & Brewster, C. (2008). The expatriate family: An international perspective. *Journal of Managerial Psychology*, 23(3), 324–346.
- Hawthorne, L. (2013). *Recognizing foreign qualifications: Emerging global trends*. Migration Policy Institute. <https://www.migrationpolicy.org/research/recognizing-foreign-qualifications-emerging-global-trends>
- Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., ... Calantone, R. J. (2014). Common beliefs and reality about PLS. *Organizational Research Methods*, 17(2), 182–209.
- Ho, N. T. T., Seet, P. S., & Jones, J. (2016). Understanding re-expatriation intentions among overseas returnees – An emerging economy perspective. *The International Journal of Human Resource Management*, 27(17), 1938–1966.
- Ho, T. T. N. (2015). Abroad one more time: Understanding re-expatriation intentions among overseas returnees – An emerging economy perspective. *International Journal of Business and Management*, 10(6), 1–15.
- Hoppe, A., & Fujishiro, K. (2017). Anticipated job benefits, career aspiration, and generalized self-efficacy as predictors for migration decision-making. *International Journal of Migration, Health, and Social Care*, 13(3), 244–259. <https://doi.org/10.1108/IJMHS-02-2017-0033>
- Hsu, C. L., & Chiu, C. M. (2004). Internet self-efficacy and electronic service acceptance. *Decision Support Systems*, 38(3), 369–381.
- Huang, F., & Zou, B. (2024). English speaking with artificial intelligence (AI): The roles of enjoyment, willingness to communicate with AI, and innovativeness. *Computers in Human Behavior*, 159, Article 108355. <https://www.sciencedirect.com/science/article/abs/pii/S0747563224002231>
- Hui, Z., Yizhou, Z., & Raju, V. (2024). Descriptive study on cloud note user's migration: Based on extended expectation confirmation theory. *Migration Letters*, 21(S5), 647–664.
- Jin, C., Li, B., Jansen, S. J., Boumeester, H. J., & Boelhouwer, P. J. (2022). What attracts young talents? Understanding the migration intention of university students to first-tier cities in China. *Cities*, 128, Article 103802.
- Joardar, A., & Weisang, G. (2019). A multi-country study of factors influencing expatriate career intentions. *Journal of International Management*, 25(2), Article 100660.
- Kaplan, S., Grünwald, L., & Hirte, G. (2016). The effect of social networks and norms on the inter-regional migration intentions of knowledge-workers: The case of Saxony, Germany. *Cities*, 55, 61–69.
- Karaïskos, D., Tzavellas, E., Balta, G., & Paparrigopoulos, T. (2010). Social network addiction: A new clinical disorder? *European Psychiatry*, 25, 855. [https://doi.org/10.1016/s0924-9338\(10\)70846-4](https://doi.org/10.1016/s0924-9338(10)70846-4)

- Kim, B. (2010). An empirical investigation of mobile data service continuance: Incorporating the theory of planned behavior into the expectation-confirmation model. *Expert Systems with Applications*, 37(10), 7033–7039.
- Kline, R. B. (2016). *Principles and practice of structural equation modeling*. The Guilford Press.
- Kraimer, M. L., Wayne, S. J., & Jaworski, R. A. A. (2001). Sources of support and expatriate performance: The mediating role of expatriate adjustment. *Personnel Psychology*, 54(1), 71–99.
- Kwak, S.-Y., Cho, W.-S., Seok, G.-A., & Yoo, S.-G. (2020). Intention to use sustainable green logistics platforms. *Sustainability*, 12(8), 3502. <https://doi.org/10.3390/su12083502>
- LaMorte, W. W. (2019). Behavioral change models. Retrieved from <https://sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchange/BehavioralChangeTheories3.html>.
- Lauring, J., & Selmer, J. (2010). The supportive expatriate spouse: An ethnographic study of spouse involvement in expatriate careers. *International Business Review*, 19(1), 59–69.
- Lee, E. S. (1966). A theory of migration. *Demography*, 3(1), 47–57. <https://doi.org/10.2307/2060063>
- Lee, J., & Kim, Y.-K. (2020). Online reviews of restaurants: Expectation-confirmation theory. *Journal of Quality Assurance in Hospitality & Tourism*, 21(5), 582–599. <https://doi.org/10.1080/1528008x.2020.1712308>
- Leou, E. C., & Wang, H. (2023). A holistic perspective to predict yoga tourists' revisit intention: An integration of the TPB and ECM model. *Frontiers in Psychology*, 13, Article 1090579.
- Li, Z., Du, N., Wang, B., & Oteng-Darko, C. (2022). Impact of social influence on users' continuance intention toward sports and fitness applications. *Frontiers in Public Health*, 10, 1–16. <https://doi.org/10.3389/fpubh.2022.1031520>
- Liao, C., Palvia, P., & Lin, H. N. (2009). The roles of habit and web site quality in e-commerce. *International Journal of Information Management*, 29(6), 469–480.
- Lin, S.-C., Nadlifatin, R., Amna, A., Persada, S., & Razif, M. (2017). Investigating citizen behavior intention on mandatory and voluntary pro-environmental programs through a pro-environmental planned behavior model. *Sustainability*, 9(7), 1289. <https://doi.org/10.3390/su9071289>
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57(9), 705–717.
- Lombao, N. F. G. (2023). *The impact of migration in the Philippines: What about those left behind?*
- Mamman, M., Ogunbado, A. F., & Abu-Bakr, A. S. (2016). Factors influencing customer's behavioral intention to adopt Islamic banking in Northern Nigeria: A proposed framework. *Journal of Economics and Finance*, 7(1), 51–55. <https://doi.org/10.9790/5933-07135155>
- Massey, D. S., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A., & Taylor, J. E. (1993). Theories of international migration: A review and appraisal. *Population and Development Review*, 19(3), 431–466. <https://doi.org/10.2307/2938462>
- Mediran, M. G. S., Revilla, J. A. D., Caroché, M. L. P., Mercado, A. M. S., & Villanueva, M. J. S. (2021). Investigating the intention to work overseas among Filipino engineering students by testing a structural equation model based on an extended theory of planned behavior. *Journal of Economics, Management & Agricultural Development*, 7(2), 17–43.
- Meng, C. K., Piaralal, S. K., Islam, M. A., Yusof, M. F. B., & Chowdhury, R. S. (2023). International medical tourists' expectations and behavioral intention towards health resorts in Malaysia. *Heliyon*, 9(9).
- Milwu, J. O. (2011). The role of realistic job previews and expectation lowering procedures for expatriate managers. *Drishtikon: A Management Journal*, 2(1).
- Mishra, A., & Singh, P. (2022). Attitude, subjective norms, and perceived behavioural control as predictors of entrepreneurial intentions among engineering students.
- Mol, S. T., Born, M. P., Willemsen, M. E., & Van Der Molen, H. T. (2005). Predicting expatriate job performance for selection purposes: A quantitative review. *Journal of Cross-Cultural Psychology*, 36(5), 590–620. <https://doi.org/10.1177/0022022105278544>
- Moulik, S. R., & Mazumdar, S. (2012). Expatriate satisfaction in international assignments: Perspectives from Indian IT professionals working in the US. *International Journal of Human Resource Studies*, 2(3), 59–76.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460–469. <https://doi.org/10.2307/3150499>
- Ong, A. K., Prasetyo, Y. T., Salazar, J. M., Erfe, J. J., Abella, A. A., Young, M. N., ... Ngurah Perwira Redi, A. A. (2022). Investigating the acceptance of the reopening Bataan Nuclear Power Plant: Integrating Protection Motivation Theory and extended theory of planned behavior. *Nuclear Engineering and Technology*, 54(3), 1115–1125. <https://doi.org/10.1016/j.net.2021.08.032>
- Orbeta, A. C., & Abrigo, M. (2011, July). *Managing international labor migration: The Philippine experience*. Econstor. <https://www.econstor.eu/bitstream/10419/22319/1/dp79.pdf>.
- O'Steen, B. (2021, September 24). Bilateral labor agreements and the migration of Filipinos: An instrumental variable approach. *IZA Journal of Development and Migration*, 12(1), 1–29. <https://sciencedo.com/es/article/10.2478/izajodm-2021-0011>.
- Padillo, M. A. (2018, June 22). *The highest paying jobs for OFWs*. iMoney.ph. <https://www.imoney.ph/articles/high-pay-in-demand-ofw-jobs>.
- Portes, A., & Rumbaut, R. G. (2014). *Immigrant America: A portrait*. University of California Press.
- Premkumar, G., & Bhattacharjee, A. (2008). Explaining information technology usage: A test of competing models. *Omega*, 36(1), 64–75.
- Ravenstein, E. G. (1885). The laws of migration. *Journal of the Statistical Society of London*, 48(2), 167–235. <https://doi.org/10.2307/2979181>
- San Juan, E. (2009). Overseas Filipino workers: The making of an Asian-Pacific diaspora. *The Global South*, 3(2), 99–129. <https://doi.org/10.2979/gso.2009.3.2.99>
- Scott, A. (2010, March 1). Jobs or amenities? Destination choices of migrant engineers in the USA. *Papers in Regional Science*, 89(1), 43–63. [https://econpapers.repec.org/article/blapresci/v\\_3a89\\_3ay\\_3a2010\\_3ai\\_3a1\\_3ap\\_3a43-63.htm](https://econpapers.repec.org/article/blapresci/v_3a89_3ay_3a2010_3ai_3a1_3ap_3a43-63.htm).
- Selmer, J., & Lauring, J. (2011). Expatriate expectations vs. reality: A study of the adjustment of Western expatriates in China. *Asia Pacific Business Review*, 17(3), 299–317.
- Shaffer, M. A., & Harrison, D. A. (2001). Forgotten partners of international assignments: Development and test of a model of spouse adjustment. *Journal of Applied Psychology*, 86(2), 238–254.
- Sims, R. A. (2011). *Cultural intelligence as a predictor of job satisfaction and intent to renew contract among expatriate international school teachers in Latin America*. TUI University.
- Snihotta, F. F., Presseau, J., & Araújo-Soares, V. (2014). Time to retire the theory of planned behavior. *Health Psychology Review*, 8(1), 1–7.
- Soorani, F., & Ahmadvand, M. (2019). Determinants of consumers' food management behavior: Applying and extending the theory of planned behavior. *Waste Management*, 98, 151–159. <https://doi.org/10.1016/j.wasman.2019.08.025>
- Sparrow, P., Brewster, C., & Chung, C. (2016). *Globalizing human resource management*. Routledge.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. Sage.
- Stroh, L. K., Gregersen, H. B., & Black, J. S. (1998). Closing the gap: Expectations versus reality among repatriates. *Journal of World Business*, 33(2), 111–124.
- Suutari, V., & Brewster, C. (2000). Making their own way: International experience through self-initiated foreign assignments. *Journal of World Business*, 35(4), 417–436.
- Tacoli, C. (1999). International migration and the restructuring of gender asymmetries: Continuity and change among Filipino labor migrants in Rome. *The International Migration Review*, 33(3), 658–682. <https://doi.org/10.2307/2547530>
- Takeuchi, R., Yun, S., & Tesluk, P. E. (2002). An examination of crossover and spillover effects of spousal and expatriate cross-cultural adjustment on expatriate outcomes. *Journal of Applied Psychology*, 87(4), 655–666.
- Tharenou, P. (2003). The initial development of receptivity to working abroad: Self-initiated international work opportunities in young graduate employees. *Journal of Occupational and Organizational Psychology*, 76(4), 489–515.
- Tharenou, P., & Caulfield, N. (2010). Will I stay or will I go? Explaining repatriation by self-initiated expatriates. *Academy of Management Journal*, 53(5), 1009–1028.
- Tung, R. L. (2008). Career issues in expatriation. *International Journal of Human Resource Management*, 19(6), 964–985.
- Valvi, A. C., & West, D. (2013). E-loyalty is not all about trust, price also matters: Extending expectation-confirmation theory in bookselling websites. *Journal of Electronic Commerce Research*, 14(1), 99–123. <http://www.csulb.edu/journals/jecr/issues/20131/paper7.pdf>.
- Van Dalen, H. P., & Henkens, K. (2008). Emigration intentions: Mere words or true plans? Explaining international migration intentions and behavior. In *Explaining international migration intentions and behavior* (June 30, 2008).
- Van Dalen, H. P., & Henkens, K. (2013). Explaining emigration intentions and behavior in the Netherlands. *Population Studies*, 67(2), 225–241.
- Van Ryzin, G. G. (2004). Expectations, performance, and citizen satisfaction with urban services. *Journal of Policy Analysis and Management*, 23(3), 433–448. <https://doi.org/10.1002/pam.20020>
- Vertovec, S. (2007, September 25). *Super-diversity and its implications*. Taylor and Francis. <https://www.tandfonline.com/doi/abs/10.1080/01419870701599465>.
- Vidal, M. E. S., Valle, R. S., & Aragón, M. I. B. (2007). Antecedents of repatriates' job satisfaction and its influence on turnover intentions: Evidence from Spanish repatriated managers. *Journal of Business Research*, 60(12), 1272–1281.
- Weerasinghe, C. A. K., & Kumar, S. (2015). Intention to pursue overseas jobs among university students and graduates: A case study from University of Peradeniya, Sri Lanka. *Tropical Agricultural Research*, 26(1), 93–103.
- Westland, J. C. (2010). Lower bounds on sample size in structural equation modeling. *Electronic Commerce Research and Applications*, 9(6), 476–487.
- Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample size requirements for structural equation models: An evaluation of power, bias, and solution propriety. *Educational and Psychological Measurement*, 73(6), 913–934.
- Xiujun, T., & Xin, Z. (2019). The willingness, expectation and social adaptability of migrants to be relocated to neighboring counties. *Management Review*, 31(11), 267.
- Yacat, R. (2011, March 21). *Globalization and the Filipino worker: Are Filipino professionals ready for the world?* Issuu. <https://issuu.com/ryacat/docs/pidsdrn01-22>.
- Yazdanpanah, M., & Zobeidi, T. (2017). Why do they want to migrate from rural areas? A psychological perspective from Iran. *International Journal of Migration and Integration Studies*, 7(3), 283–292.
- Yuan, S., Ma, W., Kanthawala, S., & Peng, W. (2015). Keep using my health apps: Discover users' perception of health and fitness apps with the UTAUT2 model. *Telemedicine and e-Health*, 21(9), 735–741.
- Yurtkoru, S. E., Dauda, E., & Sekarawisut, W. (2017). The theory of planned behavior augmented with cognitive cultural intelligence and work-related perceptions in predicting intention to work abroad. *Journal of Advanced Management Science*, 5(3), 182–190.
- Zhang, Y., & Oczkowski, E. (2016). Exploring the potential effects of expatriate adjustment direction. *Cross Cultural & Strategic Management*, 23(1), 158–183.
- Zhou, Y. (2021). Expatriate satisfaction and motivation in multinational corporations. In *Global trade in the emerging business environment* (pp. 179–195). Routledge.