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Factors Influencing Teachers' Self-Efficacy and Willingness in Teaching Students with Autism Spectrum Disorder in Hong Kong

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Abstract

Background: Today, most students with autism spectrum disorder (ASD) are included in general education settings. Teachers are at the forefront in implementing inclusive practices and supporting these students' learning. Their self-efficacy and willingness can determine the success of including students with ASD. In Hong Kong, little is known about the perspectives of in-service teachers working with students with ASD in classrooms. Methods: In this study, we measured teachers' self-efficacy and willingness to implement inclusive practices for students with ASD and explored the relationship between them. Factors contributing to teachers' self-efficacy and willingness were also investigated. Quantitative data were collected from 446 in-service teachers who participated in a professional development course about supporting students with disabilities at a university in Hong Kong. Results: The results reveal that Hong Kong teachers expressed a moderate level of self-efficacy and willingness in implementing inclusive practices for students with ASD. The results indicate that contact with students with ASD, principal support, and resource availability are predictors of teachers' self-efficacy and willingness to implement inclusive practices. However, knowledge of inclusive legislation and policy is a predictor of self-efficacy but not willingness. Additionally, age influences teachers' self-efficacy in inclusive practices, while gender affects their self-efficacy in inclusive practices and collaboration. Conclusions: These findings offer implications and suggestions to policymakers and school principals on supporting teachers in implementing inclusive education and promoting sustainable inclusive practices for students with ASD. These stakeholders should foster supportive environments that encourage positive interactions with students with ASD while providing targeted professional development in assessment and legislative knowledge.

Keywords: students with autism spectrum disorder; teacher training; teachers' self-efficacy; teachers' willingness; inclusive practices

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1. Introduction

Inclusive education is a pedagogical approach that embraces the diversity of all learners, regardless of their abilities or disabilities (UNESCO, 2009), by allowing all students to be educated in general education classrooms with accommodations and supports. It is founded on the principle that equitable education is a fundamental right and that learning alongside peers fosters social cohesion and benefits all students. Through inclusive education practices, most students with disabilities have been shifted from segregated special education settings to general education classes with typically developed peers,

thereby reducing barriers to participation and learning. Inclusive education policies have been stated internationally by many developed countries for over three decades. Most developed countries have laws that mandate the promotion of inclusive education to prevent discrimination against students with disabilities. Examples include the No Child Left Behind Act of 2001 and the Individuals with Disabilities Education Act in the United States; The Special Educational Needs and Disability Act 2001, which is also known as SENDA, in the United Kingdom; and the Federal Disability Discrimination Act (DDA) 1992 in Australia. Hong Kong also took this step by establishing the Disability Discrimination Ordinance (Cap. 487), which was enacted in 1995 (Hong Kong, 1996). Since then, students with disabilities, including specific learning difficulties, visual impairment, hearing impairment, and autism spectrum disorder (ASD), are encouraged to be included in general school settings alongside their typically developing peers (Equal Opportunities Commission, 2015).

Autism is a complex neurodevelopmental condition characterised by challenges in social communication and restricted, repetitive behaviour patterns and interests (American Psychiatric Association, 2022). Autism is a spectrum, which means that each individual with ASD is unique, and every student has their own distinct profile of cognitive abilities and support needs. They can exhibit academic strengths, including perseverance, attention to detail, critical thinking abilities to understand complex ideas, and excellent memory for specific information (Gurbuz et al., 2019). Conversely, social interaction and communication often result in difficulties in a traditional classroom environment, especially regarding behaviour (Jury et al., 2021). Thus, these students may require autism-specific approaches and teaching strategies from teachers compared with students who have other disabilities, including specific learning and physical disabilities.

The number of students diagnosed with ASD has increased over recent decades worldwide (Gurbuz et al., 2019; Meindl et al., 2020). Data from the Centers for Disease Control and Prevention (2025) indicated that, in 2000, approximately 1 in 150 children were diagnosed with ASD; by 2025, the number of children diagnosed with autism had risen to 1 in 31. The increasing prevalence of ASD has led to a growing number of students with ASD being educated in general education classrooms. In Hong Kong, according to the Education Bureau (2025), in 2020, there were 11,870 students with ASD enrolled in general primary and secondary schools; by 2025, that figure had risen to 14,190. This represents an approximately 20% increase over five years. As the number of students with ASD in general education classrooms continues to increase, teachers' self-efficacy and willingness to engage with these students have become increasingly crucial.

Within this framework of inclusivity, students with disabilities represent a significant population, and teachers are at the forefront of successful inclusive education (Garrad et al., 2019). Including these students in general education settings is not merely a legal obligation; it is a practice that also enriches the learning environment for all students. However, it requires inclusive teaching strategies that support diverse learning needs. Teachers must adapt to various learning styles and develop their behavioural management skills in inclusive classrooms. Their ability to do so is a critical factor in successful inclusive education.

Research acknowledges that implementing inclusive education places considerable stress and demands on teachers. Anglim et al. (2018) interviewed six primary school teachers in Ireland, highlighting their apprehension and lack of confidence when teaching students with ASD. Teachers in their study expressed uncertainty, especially regarding behaviour management, and pointed to systemic issues such as insufficient access to training, resources, and ASD-specific support. Other studies (e.g., Sharma et al., 2019; Tăbăcaru et al., 2022) have also consistently shown that teachers encounter challenges,

including a lack of teacher education in catering to students with disabilities, limited collaboration opportunities with professionals and colleagues, insufficient resources, and inadequate support from administrative staff. Teachers often feel unprepared and unsupported (Chow & Sharma, 2024) and experience stress when implementing inclusion. Teaching students with diverse learning needs without adequate resources can be intensely challenging.

1.1. Teachers' Self-Efficacy in Teaching Students with ASD

Teacher self-efficacy is important for determining the success of inclusive education. Self-efficacy refers to an individual's belief in their ability to execute and succeed in specific tasks or to manage prospective situations (Bandura, 1997). Teacher self-efficacy is a specific type of self-efficacy (Tschannen-Moran et al., 1998) explicitly referring to teachers' beliefs in their ability to organise, motivate, and teach students as well as manage classroom issues (Tschannen-Moran & Hoy, 2001). Research shows that teachers with high self-efficacy are more likely to implement instructional and inclusive teaching strategies (Burić & Kim, 2020), such as differentiated instruction, collaborative learning, and positive behaviour supports tailored to diverse learners, including those with disabilities. Furthermore, teacher self-efficacy influences teachers' willingness to reflect on their teaching. Woodcock and Faith (2021) surveyed 105 teachers in Australia and found that highly efficacious teachers were more likely to not only provide positive feedback, express less frustration, and hold higher expectations for all students, including those with learning disabilities, but also reflect on their teaching practices to understand why students were underperforming, rather than attributing it solely to student failings. Woodcock et al. (2022) further demonstrated that while teachers with high and low self-efficacy held similar conceptual understandings of inclusive education, their classroom practices differed. Teachers with higher efficacy focused on student success, accessibility, and building confidence, whereas teachers with lower efficacy focused on managing behaviour and often viewed student differences as challenges or obstacles.

Teacher self-efficacy can also predict teachers' attitudes towards inclusive education and their intentions to implement inclusive practices (Chow, 2024a). Several studies have indicated that teachers with high self-efficacy in teaching students with disabilities tend to have more positive attitudes towards inclusive education and are more willing to include students with diverse needs in their classrooms. For example, Savolainen et al. (2022), who used a cross-lagged panel design over three years, found that teachers' self-efficacy beliefs positively affected their general attitudes about inclusion. Moreover, teacher self-efficacy in teaching students with ASD is strongly linked to their favourable attitudes. Meanwhile, Latorre-Cosculluela et al. (2022) developed a structural equation model to show that the perceived efficacy of educational practices resulted in more positive attitudes towards educating students with ASD in inclusive settings. This finding is supported by Memisevic et al. (2024), who reported that teachers who felt competent had significantly more positive attitudes towards the inclusion of students with ASD. Their study suggests that attitudes improve when teachers feel they can support students with ASD by implementing inclusive education.

1.2. Willingness of Teachers in Implementing Inclusive Education

Teachers' willingness is essential to successful inclusive education. According to Gilor and Katz (2021), teachers' willingness refers to teachers' readiness to adopt inclusive practices, support students with disabilities alongside their typically developed peers, and assume responsibility for students' academic and social development. Willingness moves teachers from passive acceptance to active commitment in implementing inclusive prac-

tices, making it a significant factor in the successful inclusion of students with disabilities (Gilor & Katz, 2021).

Recent research has paid significant attention to understanding teachers' willingness to engage in inclusive education. Anthony and Yasin (2019) surveyed 50 pre-service teachers in Sabah, Malaysia. They found that 86% of pre-service teachers were ready to accept students with disabilities without prejudice, and 84% were willing to approach and recognise these students in their classrooms. This positive result is echoed by Gilor and Katz (2021), who found that most pre-service teachers were willing to teach students with disabilities and demonstrated significant motivation to identify student difficulties and provide support beyond school hours. These studies suggest that exposure to formal teacher education may be a key factor in preparing these future educators to embrace inclusive education practices (Anthony & Yasin, 2019).

Several other studies have shown that teacher training has a profound positive impact on teachers' willingness. Ojok and Wormnæs (2013) found that attendance at workshops and seminars improved teacher willingness and attitudes towards inclusive education. Similarly, Kisbu-Sakarya and Doenyas (2021) revealed that teacher training improved teachers' self-efficacy for teaching students with ASD, which in turn mediated greater willingness to teach inclusive classes and a stronger intention to implement inclusive teaching practices. The authors further identified attitudes towards inclusive education as a significant direct predictor of willingness, highlighting that training that successfully shifts attitudes is likely to be most effective.

Finally, there is some evidence that specific demographic variables influence teachers' willingness. Nwosu et al. (2024) surveyed 502 teachers in Anambra State, Nigeria, and found that age and gender can be determining factors, but an increase in the number of years of teaching experience had a significant positive correlation with willingness to include students with disabilities. The results imply that as teachers gain experience, they may develop greater confidence and competence in addressing diverse student needs.

1.3. Aims and Research Questions

While existing research has extensively examined teachers' self-efficacy and attitudes towards inclusive education for students with disabilities, most studies have been conducted within Western contexts. Consequently, there is a relative scarcity of research focused on teachers' experiences with students with ASD in Asian regions, including Hong Kong, which this study aims to address. Specifically, we investigated teachers' self-efficacy and willingness to implement inclusive practices, as well as the relationship between them, and examined the factors contributing to teachers' self-efficacy and willingness. This study is intended to provide valuable implications for policymakers and school principals who wish to create an inclusive teaching and learning environment for teachers and all students by addressing the following research questions:

1. To what extent do teachers in Hong Kong demonstrate self-efficacy and willingness to teach students with ASD?
2. What factors influence teachers' self-efficacy and willingness to include students with ASD?
3. Is there a correlation between teachers' self-efficacy and willingness to teach students with ASD?

2. Method

2.1. Participants

This study comprised 446 participants who were invited to complete an online survey on the first day of a professional training course about catering to students with diverse

learning needs at a university in Hong Kong. The participants included primary school teachers (n = 115, 25.8%), secondary school teachers (n = 324, 72.6%), and special school teachers (n = 7, 1.6%) representing different regions in Hong Kong. The sample consisted of 307 female (68.8%) and 139 male (31.2%) respondents. Their ages included below 25 (n = 3, 0.7%), 25 to 30 years (n = 76, 17%), 31 to 35 years (n = 90, 20.2%), 36 to 40 years (n = 107, 24%), and above 40 years old (n = 170, 38.1%). Most participants held a bachelor's degree (n = 193, 43.2%) or a master's degree (n = 249, 55.8%). A small portion held less than a bachelor's degree (n = 2, 0.4%) or a PhD (n = 2, 0.4%).

2.2. Ethical Approval

Prior to data collection, ethical approval was obtained from the Research Ethics Committee of the university with which this research is affiliated. Each participant was given an explanatory statement outlining the study's purpose and procedures, as well as an oral explanation to ensure their comprehension of the research. They were explicitly informed that their participation in the study was voluntary, with no adverse consequences for not joining. Consent was implied upon submission of the anonymous survey. The standard consent requirement when obtaining consent is impractical in this study, as the research was approved by an ethics committee (World Medical Association, 2008). As the survey was entirely anonymous, participants could not be identified post-submission, and withdrawal was impossible after survey submission.

2.3. Instruments

The self-administered questionnaire consisted of a section regarding demographic information and two scales to assess teachers' self-efficacy and willingness to implement inclusive practices for students with ASD. Participants' demographic information, including age, gender, qualification, school type, and level of training experience, was collected.

The Teacher Efficacy for Inclusive Practices (TEIP) scale (Sharma et al., 2012) is a well-validated instrument widely used in international research (e.g., Chow, 2024a; Gülsün et al., 2023; McGarrigle et al., 2023; Savolainen et al., 2022) that consists of 18 items assessing three factors: inclusive instruction, managing behaviour, and collaboration. It uses a 6-point Likert scale ranging from Strongly Disagree to Strongly Agree. For this study, the scale was modified to specifically refer to students with ASD rather than to students with disabilities in general. An example item is 'I am confident in designing learning tasks so that the individual needs of students with ASD are accommodated'.

The Teacher Willingness for Inclusive Practice (TWIP) scale is a new instrument designed for this study. The item pool measuring teachers' willingness and attitudes was developed per DeVellis's (2017) guidelines, drawing on themes identified in the extant literature. An expert panel comprising two special education coordinators and three university lecturers familiar with ASD and inclusive education in Hong Kong was invited to evaluate the scale for construct clarity, relevance, and representativeness. Items were refined based on their feedback to ensure they adequately captured the dimensions of willingness. The finalised 7-item scale measured teachers' willingness on a 7-point Likert scale, ranging from 1 = Strongly Disagree to 7 = Strongly Agree. All items are positively worded. An example item is 'I am willing to adapt the curriculum for students with ASD who experience learning difficulties in the classroom'.

2.4. Data Analysis

The data were analysed using the Statistical Package for the Social Sciences (version 29). Cronbach's alpha was computed to assess the internal consistency and reliability of the scales. Descriptive statistics, including means and standard deviations (SD), were calculated to examine teachers' self-efficacy and their willingness to implement inclusive practices

for students with ASD in their classrooms. Pearson's correlation analysis examined the relationship between teachers' self-efficacy and their willingness, and linear regression analysis was performed to identify the predictive factors influencing teachers' self-efficacy and willingness.

3. Results

Reliability analyses were conducted to evaluate the internal consistency of the TEIP and TWIP scales (Table 1). The TEIP fully demonstrated excellent reliability; all of its subscales exceeded the widely accepted threshold of 0.70 for research instruments. The Factor 1 (efficacy in inclusive instruction) and Factor 3 (efficacy in collaboration) subscales fell within the good reliability range. The Factor 2 (efficacy in managing behaviour) subscale approached near-excellent reliability.

Table 1. Mean, SD, and Cronbach's alpha for TEIP and TWIP scales.

	α	*M*	*SD*
TEIP (full scale)	0.95	3.74	0.66
TEIP (Factor 1: inclusive instruction)	0.87	3.71	0.70
TEIP (Factor 2: managing behaviour)	0.92	3.69	0.83
TEIP (Factor 3: collaboration)	0.87	3.85	0.69
TWIP (full scale)	0.85	4.95	0.68

Note. TEIP scale responses range from 1 to 6. TWIP scale responses range from 1 to 7.

The TWIP scale's reliability showed a reasonable range, indicating acceptable consistency for research purposes. The TWIP scale underwent exploratory factor analysis (EFA) conducted to examine its underlying structure. Principal component analysis with varimax was applied, as the factors were initially assumed to correlate. The EFA results showed that the eigenvalue is greater than one, supporting a unidimensional structure, with all items loading significantly on a single factor and the loadings exceeding 0.5 (Truong & McColl, 2011). The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy (KMO = 0.835) and Bartlett's test of sphericity ($p < 0.001$) confirmed the suitability of the data for factor analysis. The single component explained 53.82% of the variance.

The means and SDs were calculated for both the TEIP and TWIP scales. The TEIP scale and its subscales (i.e., efficacy in inclusive instruction, managing behaviour, and collaboration) yielded a mean score ranging from 3.69 to 3.85 on a 6-point Likert scale, indicating a moderate level of teachers' self-efficacy in implementing inclusive practices for students with ASD. The scores for most items of TEIP fell into the range of 'somewhat agree', except for a single item regarding teachers' ability to accurately gauge student comprehension of what they taught. The participants disagreed somewhat (M = 3.44, SD = 0.84) with this item.

The TWIP scale reported a mean of M = 4.95 (SD = 0.68) on a 7-point Likert scale, indicating a moderate willingness to implement inclusive practices. The mean scores for most items revealed that participants generally expressed moderate agreement, falling within the 'somewhat agree' range for most statements (Table 2). However, a particular item about their willingness to take professional development courses to enhance teaching skills for students with ASD (M = 5.45, SD = 0.85) stood out, emerging as the highest-scoring item where participants demonstrated explicit agreement.

Table 2. Mean scores of TWIP items.

		M	*SD*
1.	I am willing to adapt the curriculum for students with autism who experience learning difficulties in the classroom.	4.53	1.03
2.	I am willing to consult with parents of students with autism about their child's classroom challenges.	5.17	0.89
3.	I am willing to collaborate with colleagues to develop effective strategies for supporting students with autism in the classroom.	5.25	0.87
4.	I am willing to take professional development courses to enhance my teaching skills for students with autism.	5.45	0.85
5.	I am willing to work with students with autism who display challenging behaviours to find better support approaches.	4.93	0.84
6.	I am willing to facilitate social communication activities for students with autism who have severe disabilities.	4.50	1.01
7.	I am willing to adjust assessment methods to meet the needs of students with autism (e.g., provide extended time to complete tasks or modify assessment questions).	4.83	1.01

3.1. The Relationship Between Teachers' Self-Efficacy and Willingness

Pearson's correlation analysis revealed a significant positive relationship between teachers' self-efficacy and their willingness to implement inclusive practices for students with ASD (Table 3). The results indicate that teachers with higher self-efficacy in inclusive instruction, managing behaviour, and collaboration were more likely to express willingness to implement inclusive practices in their classrooms. Additionally, the results show that teachers' self-efficacy in collaboration had the strongest association with their willingness ($r = 0.56$, $p < 0.001$). In contrast, self-efficacy in inclusive instruction demonstrated a moderate ($r = 0.43$, $p < 0.001$) but still significant correlation.

Table 3. Pearson's correlation of teachers' self-efficacy (TEIP) and willingness (TWIP).

	1	**2**	**3**	**4**
TEIP (full scale)	-			
TEIP (Factor 1: inclusive instruction)	0.90 ***	-		
TEIP (Factor 2: managing behaviour)	0.91 ***	0.73 ***	-	
TEIP (Factor 3: collaboration)	0.88 ***	0.70 ***	0.69 ***	-
TWIP (full scale)	0.53 ***	0.43 ***	0.44 ***	0.56 ***

*** $p < 0.001$.

3.2. Predictors of Teachers' Self-Efficacy

Multiple linear regression analyses were conducted to examine the predictive power of gender, age, contact with students with ASD, knowledge of legislation, principal support, and resource availability on the three factors of teacher self-efficacy: (1) efficacy in inclusive instruction, (2) efficacy in managing behaviour, and (3) efficacy in collaboration (see Table 4). The regression models for these factors were statistically significant. Contact with ASD students, knowledge of legislation, principal support, and resource availability were all significant predictors. These findings suggest that teachers who frequently interact with students with ASD have greater awareness of inclusive education policies, receive stronger administrative support, have better access to adequate resources, and

report higher self-efficacy in delivering inclusive instruction. They also feel more confident in managing classroom behaviour, and they feel more confident in collaborating with colleagues, parents, and specialists when implementing inclusive practices for students with ASD in their classrooms.

Table 4. Predictors of teachers' self-efficacy in inclusive instruction, managing behaviour, and collaboration.

Variables	Efficacy in Inclusive Instruction			Efficacy in Managing Behaviour			Efficacy in Collaboration		
	B	**SE *B***	***β***	***B***	**SE *B***	***β***	***B***	**SE *B***	***β***
Gender	−0.10	0.06	−0.06	−0.02	0.08	−0.10	−0.19	0.06	−0.13 **
Age	−0.08	0.03	−0.14 **	−0.06	0.03	−0.08	−0.50	0.03	−0.08 *
Contact with ASD students	0.24	0.05	0.23 ***	0.33	0.06	0.26 ***	0.21	0.05	0.20 ***
Knowledge of legislation and policy	0.19	0.04	0.28 ***	0.15	0.05	0.14 **	0.11	0.04	0.13 **
Principal support	0.12	0.04	0.16 ***	0.09	0.04	0.10 *	0.11	0.04	0.15 **
Resources availability	0.10	0.04	0.12 *	0.05	0.05	0.22 ***	0.25	0.04	0.30 ***
R^2		0.26			0.24			0.30	
Model statistics	$F(6, 439) = 25.06$ ***			$F(6, 439) = 22.60$ ***			$F(6, 439) = 31.90$ ***		

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Additionally, age was a significant factor in teachers' self-efficacy in inclusive instruction and collaboration; younger teachers reported higher efficacy in inclusive instruction and felt more confident in collaborative practices. Furthermore, gender significantly predicted teachers' self-efficacy in collaboration, with female teachers reporting higher self-efficacy in collaboration when implementing inclusive practices than their male colleagues.

The findings highlight that while all factors contribute to teachers' self-efficacy, contact with students with ASD, knowledge of legislation, principal support, and resource availability consistently predict teachers' self-efficacy across multiple domains. In contrast, gender and age may vary the results, depending on the specific efficacy dimension.

3.3. Predictors of Teachers' Willingness

Multiple linear regression analysis revealed significant relationships between several predictor variables and teachers' willingness to implement inclusive practices for students with ASD. The overall model was statistically significant (see Table 5). Three factors emerged as significant positive predictors of willingness to implement inclusive practices.

Table 5. Predictors of teachers' willingness.

Variables	***B***	**SE *B***	***β***
Gender	−0.10	0.06	−0.07
Age	−0.04	0.03	−0.06
Contact with students with ASD	0.16	0.05	0.16 ***
Knowledge of legislation and policy	−0.01	0.04	−0.01
Principal support	0.16	0.04	0.22 ***
Resource availability	0.15	0.04	0.18 ***
R^2		0.17	
Model statistics	$F(6, 439) = 14.83$ ***		

*** $p < 0.001$.

Principal support demonstrated the strongest predictive power to teachers' willingness, suggesting that administrative support, especially from a leadership role, is critical to teachers' readiness to adopt inclusive approaches. The results further reveal that contact

with students with ASD showed a significant positive association with teachers' willingness, indicating that teachers with more frequent interactions with students with ASD reported greater acceptance of inclusive practices. Similarly, resource availability significantly predicted teachers' willingness, with better-resourced teachers showing greater inclination towards implementing inclusive practices.

Nevertheless, several variables that significantly influenced teachers' self-efficacy did not reach statistical significance in predicting their willingness. The results show that knowledge of legislation regarding inclusive education was not significantly associated with willingness, nor were demographic factors, including age and gender. These findings suggest that while experiential (i.e., experiences with students with ASD) and environmental factors (i.e., support of principal and resources) strongly influence willingness to implement inclusive practices, individual characteristics (i.e., gender and age) and formal knowledge of policies may play a limited role in this aspect of teachers' willingness.

4. Discussion

Teachers are fundamental to the success of inclusive education, particularly in how they implement effective practices for students with disabilities. Their self-efficacy and willingness to adapt supportive curriculum and teaching strategies greatly influence students' learning experiences. We examined teachers' self-efficacy and willingness, particularly in Hong Kong school settings, and their experience with implementing inclusive practices for students with ASD.

Overall, the results reveal that Hong Kong teachers expressed a moderate level of self-efficacy in implementing inclusive practices for students with ASD. This finding suggests that while many teachers feel reasonably confident in their ability to implement inclusive practices and support students with ASD in schools, there are areas of concern that still warrant attention. For one specific item on the efficacy scale, teachers reported a somewhat disagreeing response regarding their ability to gauge student comprehension of the material they taught accurately. This finding highlights a significant teacher self-efficacy gap in an area that is crucial for effective inclusive instruction. An inability to effectively or accurately evaluate how well students grasp class content can hinder teachers' efforts to adapt their teaching strategies and provide the necessary support to all learners. This gap suggests an area for potential growth, indicating that professional development focused on assessment techniques and strategies for understanding student comprehension could be beneficial. By addressing this specific concern, teachers may enhance their overall efficacy in inclusive education, ultimately improving student learning outcomes.

The scale scores revealed that overall, teachers were moderately willing to implement inclusive practices for students with ASD. The results of this study, therefore, suggest that while teachers may realise the importance of inclusion, they may still experience hesitation or challenges that prevent them from fully embracing these practices. However, one scale item that teachers largely agreed on was their willingness to participate in professional development courses to enhance their teaching skills for students with ASD. This finding is important as it indicates a positive attitude towards growth and a recognition of the need for further teacher training to better support learners with ASD in inclusive settings. Teachers' willingness to engage in professional development may encourage schools and policymakers to provide targeted training programmes that address evidence-based strategies for the inclusion of students with ASD.

In addition, the findings of this study reveal that teachers' willingness to implement inclusive practices was positively associated with their self-efficacy, reinforcing the reciprocal relationship between confidence in their abilities and commitment to inclusion (Kiel et al., 2020; Latorre-Cosculluela et al., 2022; McGarrigle et al., 2023). Compared with

self-efficacy in inclusive instruction and behaviour management, teachers' willingness and self-efficacy in collaboration emerged as the areas most strongly associated with implementing inclusive practices for students with ASD. This finding aligns with previous research (e.g., Chow, 2024b; Szumski et al., 2025), which highlights that collaborative competence, such as working with special educators, paraprofessionals, and parents, plays a more critical role in fostering inclusion than standalone classroom skills. Classroom teachers who collaborate closely with special education teachers and other professionals could gain access to specialised strategies and behavioural interventions that would otherwise remain outside their expertise (Friend & Cook, 2017). Such collaborations are especially important when teachers express concerns about their ability to meet with students with diverse needs independently.

Regarding predictors of teachers' self-efficacy, the results show that four key factors—contact with students with ASD, knowledge of legislation, principal support, and resource availability—emerged as predictors of all components of teachers' self-efficacy (i.e., inclusive instruction, managing behaviour, and collaboration) and willingness to implement inclusive practices. This result aligns with previous research (e.g., Devi & Ganguly, 2024; Wittwer et al., 2024), suggesting that teachers with hands-on experience with students with ASD are more likely to develop confidence in implementing inclusive practices effectively. Furthermore, consistent with previous research (e.g., Chao et al., 2017; Chow, 2024b), knowledge of legislation significantly impacted teacher self-efficacy. The results of this study also imply that teachers who are more familiar with inclusive education legislation and understand their legal responsibilities and students' rights are more likely to view inclusion as an institutional expectation rather than an optional teaching approach. Nevertheless, while legal knowledge provides the framework for inclusion, teachers still require leadership, administrative support, and adequate resources to translate this knowledge into effective practice (Chow & Sharma, 2024; Sharma et al., 2019).

In addition, this study's findings reveal that age plays a significant role in teachers' self-efficacy regarding inclusive instruction and collaboration. However, contrary to some of the literature (e.g., Kuyini et al., 2020; Woodcock et al., 2023), in this study, younger teachers exhibited higher levels of efficacy in inclusive instruction and collaboration than their older counterparts. The result suggests that age-related differences may influence teachers' confidence and effectiveness in inclusive instruction and in working collaboratively to implement inclusive practices for students with ASD. The generational difference may reflect evolving teacher preparation programmes that now emphasise inclusive pedagogy (Spratt & Florian, 2015) or have emphasised inclusive practices and collaborative teaching models (Sande & Kemp, 2022).

Gender is a significant predictor of teachers' self-efficacy in collaboration. Our findings show that female teachers reported higher collaboration efficacy than male teachers, adding nuance to the literature on gender and teacher efficacy (Wittwer et al., 2024). This result may reflect gendered socialisation patterns that emphasise relational skills and cooperative behaviours among women. Alternatively, this could suggest that female teachers feel more comfortable seeking and providing support within collaborative teaching arrangements. This finding challenges some previous assumptions about gender differences in educational settings, and further investigations into how gender roles influence teachers' perceptions of their collaborative abilities are needed.

Regarding the predictors of teachers' willingness, three factors—contact with students with ASD, principal support, and access to resources—significantly influenced participants' willingness to implement inclusive practices for students with ASD. Teachers who have had more contact with students with ASD, receive leadership support, and have sufficient resources are more willing to adopt teaching practices to include students with ASD in

their classrooms. It is believed that teachers who have had positive experiences and contact with students with ASD can exhibit greater understanding and willingness to teach these students. Similarly, teachers who have access to resources (e.g., teaching materials, qualified professionals, and special education teachers) and backing from administrators who support inclusion and provide time for planning and collaboration significantly impact teachers' willingness. The findings suggest that teachers' self-efficacy and willingness to support inclusive education are mutually reinforcing. When schools provide leadership support and resources, teachers gain greater confidence in their skills and efficacy and, as a result, become more willing to adopt inclusive teaching practices. Conversely, a lack of support may diminish their confidence and motivation, hindering effective inclusion (Anglim et al., 2018).

4.1. Implications

The findings of this study have several important implications for implementing inclusive teaching practices for students with ASD. The participating teachers demonstrated moderate levels of self-efficacy and willingness to implement inclusive practices, suggesting that they possess some skills and positive acceptance towards teaching students with ASD but still require further support to fully meet the diverse needs of these students. It is especially noticeable that teachers expressed uncertainty about accurately assessing how well their students learn in the lessons, implying a need for better assessment strategies and training for teachers in monitoring the learning progress of students with ASD. Their strong willingness to participate in professional development courses presents an opportunity to address these gaps. Hence, such teacher education courses should be mandatory and ongoing, rather than one-time workshops, to ensure sustained improvement (Devi & Ganguly, 2024). Given the positive correlation between teachers' self-efficacy and willingness, interventions targeting one area may also enhance others and thus create a reinforcing cycle of improvement.

This study identified several key factors influencing teachers' self-efficacy and willingness, including contact with students with ASD, principal support, and resource availability. These findings highlight that direct contact with students with ASD enhances teachers' confidence and willingness in managing diverse classrooms. If teachers have meaningful interactions with students with ASD, they are more likely to believe in their abilities and may be more willing to teach them effectively. Therefore, schools should prioritise structuring opportunities for interaction between teachers and students with ASD. This implication is particularly important for teachers with limited prior exposure to students with ASD, who may have anxiety or reluctance (Anglim et al., 2018). However, care should be taken to ensure that teachers' exposure to students with ASD does not occur in overcrowded, under-resourced classrooms, where their experiences may be stressful rather than empowering. Thus, schools should consider gradual inclusion strategies, allowing teachers to build competence over time. Furthermore, by incorporating practicum experiences, co-teaching models, or mentorship programmes, teacher training programmes can help bridge this gap. Policymakers should design teacher training programmes to shape school inclusion policies. Rather than the traditionally heavy focus on inclusive theory, they can focus on immersive practice and hands-on experience with students with ASD, which could better prepare teachers for real-world inclusion.

In addition, the results of this study indicate that strong leadership and adequate resources are crucial in fostering inclusive school environments. However, the current study did not investigate which aspects of principal support and resources most influence teachers' self-efficacy and willingness; thus, more research is needed to understand this in detail. It is generally believed that principals play a pivotal role in creating cultures of inclusion

(Sider et al., 2017) by providing teachers with the necessary supports, collaborative practice opportunities, and guidance on inclusive strategies. To further promote collaboration, principals could also actively engage in collaborative decision-making with teachers to address challenges in inclusive classrooms. The availability of appropriate resources, including assistive technologies and specialised materials, emerges as equally important in facilitating teachers' willingness to implement inclusive practices. Moreover, the finding that teachers are particularly willing to engage in professional development suggests that schools should prioritise high-quality, ongoing training opportunities that address both practical instructional strategies and the broader aspects of inclusive education. Teachers need to feel equipped and supported in implementing inclusive practices (Chow & Sharma, 2024), and principals can play a significant role in developing a positive and inclusive school climate.

Other factors that influence teachers' self-efficacy in implementing inclusive practices for students with ASD include knowledge of legislation, age, and gender. These findings carry important implications for teacher training and policy development. First, teachers who understand inclusive legislation and policies are more confident in implementing inclusion, implying that their knowledge of the rights and responsibilities of accommodating students with ASD enables them to make appropriate instructional adaptations and effectively advocate for necessary support. Without this knowledge, even well-supported teachers may hesitate to implement inclusive strategies due to uncertainty about their responsibilities. This issue could be effectively addressed through professional development courses incorporating training on laws and policies regarding special and inclusive education. By integrating legal education into teacher development and ongoing professional learning, schools can empower teachers to better understand their responsibilities and the rights of students with ASD. Thus, integrating legal education into teacher training and professional development is about not only compliance but also building a confident, proactive teaching workforce capable of providing inclusive education to its fullest extent.

Second, the findings indicate that younger teachers show higher efficacy in inclusive instruction, and female teachers demonstrate greater collaborative efficacy. This suggests that professional collaboration and learning communities could enhance teacher capabilities in implementing inclusion. The demographic differences in efficacy suggest that professional learning opportunities could be differentiated to meet the needs of various teacher populations, with particular attention paid to supporting more experienced teachers in developing inclusive practices. Given this finding, school leadership and policymakers should recognise these differences as indicators of where targeted support and development may be needed most. By creating cross-generational mentoring programmes (e.g., by pairing young teachers with experienced mentors), mixed-gender professional learning communities, and tailored professional development plans, schools can help all teachers develop the instructional and collaborative skills needed for effective inclusive education. Policymakers should note these patterns when designing teacher preparation standards and ongoing professional learning requirements to ensure all teachers enter and remain in the profession with strong, equitable capacities for inclusive teaching.

4.2. Limitations

This study has some limitations. Because the survey instrument was self-administered, it may be prone to dishonest responses due to social desirability bias, particularly since participants were educators. This bias may persist despite the anonymised answers. Furthermore, while the participants came from various regions across Hong Kong, they were attending a professional development course focused on inclusive education for students with disabilities. This may introduce a positive bias, as these teachers might already have

stronger inclinations towards inclusive education. As a result, generalising the findings to the broader population of teachers in Hong Kong and other locations may be challenging.

Lastly, although the survey was well-designed and performed well psychometrically, we did not investigate which aspects of principal support and resources most influence teachers' self-efficacy and willingness. Future studies should investigate the leadership practices that most effectively support inclusive education and examine how resource allocation decisions influence teachers' implementation of inclusive strategies. The demographic differences in efficacy also warrant further investigation to better understand how to support all teachers in developing inclusive practices. Qualitative research may also be needed to explore why younger teachers and women report higher self-efficacy in specific domains.

4.3. Conclusions

This study reveals that teachers in Hong Kong possess a moderate level of self-efficacy and a willingness to adopt inclusive practices for students with ASD, with a positive correlation between these two aspects. The findings have implications for teacher training programmes, school policies, and resource allocation to support teacher self-efficacy and willingness. To better prepare teachers for inclusive practices, policymakers and school leaders should foster supportive environments that encourage positive interactions with students with ASD while providing targeted professional development regarding assessment and legislative knowledge. Strong leadership and principal support, as well as the cultivation of an inclusive school climate, are essential for bridging the gap between inclusive education policies and effective classroom implementation, ultimately benefiting all students. Teachers need to feel that they are supported. Providing them with targeted support can bridge the gap between inclusive policies and their implementation, leading to better educational outcomes for students with ASD.

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