

# Perceived Competence and Social Acceptance of Preschool Children in Macao: A Case Study

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**Abstract**—In the Special Administrative Region of Macao (Macao SAR) the private sector of education comprises ninety-six per cent of the total provision of non-tertiary education. The private schools, run by churches, religious orders, political organizations, cooperatives, and individuals, were founded long ago during the Portuguese colonial administration. Some of these schools are solid institutions with high prestige and a unique identity built up over many years, and thus they tend to resist innovation. The conservative approach to teaching, in particular, is seen as a way to preserve an image of excellence. The ‘good schools’ in the private sector have a strong academic orientation, a phenomenon easily observed as early as the kindergarten years. Although the Education and Youth Affairs Bureau urges schools not to introduce handwriting in K1, and to avoid accelerating kindergarten children into primary level work, the emphasis on competence and cognitive learning outcomes in these early years remains high. This study assesses how children aged 4 to 5 years and attending kindergarten in Macau, perceive their competence and their social acceptance. The participants in the study are a group of forty-four pre-school Chinese and non-Chinese children attending a private kindergarten in Macao. Harter’s Pictorial Scale of Perceived Competence and Social Acceptance for Young Children was used to assess the children’s perceived competence and social acceptance. The data obtained show that the participants’ average scores on the competence scales were significantly higher than the scores on the acceptance scales. No significant differences were found between the Chinese and the non-Chinese children and some differences were found between boys and girls. While some adjustments to the scale are suggested, the study provides preliminary support for the instrument’s appropriateness to a Chinese social context. Some suggestions for future researchers and educational policy makers are made.

**Index Terms**—early childhood education, children’s psychology, perceived competence, social acceptance

## I. INTRODUCTION

Children’s development is affected by many ecological factors, from the proximal processes that occur in the different settings in which the child participates (e.g. the family and the school), to the more distal aspects like the values of a specific culture [1], [2]. The sense of self is an essential dimension of human development [3]. It is possible to identify two complementary distinct aspects:

the “I-self”, a sense of self as knower and actor; the “me-self”, a sense of self as object of knowledge and evaluation [3]. Self-esteem, one of the dimensions of self, emerges with cognitive development during childhood [4], [5], forming the evaluative dimension of self-concept. Children are not capable of making judgments about their value as persons until approximately the age of eight [6]. Harter and Pike [6] suggest the constructs of perceived competence and social acceptance may be more appropriate measures for understanding pre-school children’s developing self-concept. This research assumes this domain-specific conceptual approach for assessing developing self-concept.

Children’s positive self-evaluations are associated with many positive developmental outcomes. Positive correlates include, the ability to set and achieve goals, persistence in the face of difficulty, self-regulation, intrinsic motivation, and overall mental health [7]. In childhood, self-esteem is related to various dimensions of development and is considered an important indicator of adjustment and well-being. Self-esteem is also associated with education, including, children’s interest in school, school adjustment, self-efficacy at school, academic performance, and behavioral problems [5], [8], [9].

Childhood psychopathology, and specific disorders such as depression, enuresis, attention deficit hyperactivity disorder, obesity and experience of sexual abuse are associated with lowered self-esteem [4]. One particular dimension of self-concept – children’s perceived peer acceptance – is considered an important element of pre-school children’s readiness for school [10].

According to the assumption that children do not view themselves as equally adequate in all domains [6] differences in self-descriptions are expected. The original study of Harter and Pike [6] indicates that pre-school children tend to report relatively positive feelings of competence and acceptance. Indeed, young children are overoptimistic about their competence [7] because of the closeness between their real self (how they see themselves) and their ideal self (who they want to be) [11]. Data from the study of Harter and Pike [6] also showed that scores for perceived competence are higher compared to scores of social acceptance.

Sex-related differences have been found for self-esteem [12] and for peer acceptance [10]. Lindsay demonstrated that a child’s gender and the gender of their playmate significantly influenced peer acceptance [10].

Using a sociometric measure Lindsay [10] found that children given the opportunity to engage in physical activity were more accepted by their peers and, in addition those who chose to play with a same gender playmate were better liked by their peers. Peer acceptance, for young children, appears to be associated with perceived similarities in relation to gender.

Few studies have addressed the relationship between perceived competence, social acceptability and ethnicity at this age range; however, Samuels and colleagues [12] suggested that the effects of ethnicity on dimensions of pre-school children's self-concept may be minimal. In Macao SAR, no research on children's self-assessments is currently available to guide research.

The social environment affects children's self-assessments, namely by shaping their perceptions of an imaginary "ideal self". Children are influenced by and react to what they imagine are the expectations of society and significant adults for the "ideal child" [11].

To shed light on factors that might influence children's understanding of their competence and social acceptance, it is essential to provide an overview of education in Macao. Under the Portuguese administration, minimum investment was allocated to education, resulting in disproportionate private and public sector provisions. Private schools founded by churches, religious orders, political organisations, cooperatives, and individuals, are still the large majority of educational institutions despite most today being run with government subsidies.

In the school year of 2014/2015 there were 64 private schools offering formal education (96 percent of the total non-tertiary educational provision), with 54 of these joining the paid education network [13].

Kindergarten level education was offered in 50 private and 6 public schools [14]. The total number of children aged 3 to 5 years was 14,552, with boys slightly outnumbering girls [13]. Education policy in Macao increased compulsory free education to 15 years in 2007, including three years of kindergarten schooling [16].

According to the Education and Youth Affairs Bureau, in the above mentioned year, the school success rate in kindergarten was 96,7 percent. Macao has one of the highest rate of in-grade retention across all OECD countries and this starts as early as kindergarten [15], [16]. The most recent statistics (2014/2015) indicated that 1,5 per cent of kindergarten children in Macao schools were either retained or had their formal education interrupted [17].

The effect of the extensive and dominant private school system, together with the pressures of globalization and a Chinese cultural heritage which emphasizes learning to overcoming hardship [18], has shaped a competitive school culture often unresponsive to children's happiness and pace of learning.

Some of the private schools in Macao are solid institutions with high prestige, they have developed a unique identity established over many years, and are consequently resistant to innovation. The conservative approach to teaching, in particular, is seen as a way to preserve their image of excellence. The 'good schools' in

the private sector have a strong academic orientation, which is observed as early as kindergarten, where selective placement is the norm. Children's parents apply to multiple schools and the children are tutored to pass school interviews at the age of 3. Parents' educational and financial efforts to support their children's education are accompanied by expectations on schools to honor the investment. As there are no standardised examinations in Macao, the schools resort to extensive homework to prove their commitment to their clients. To live up to the standards of excellence, some private schools block entrance to children considered to have less potential for high academic achievement.

In regards to early-years education, policy makers have identified the inflated emphasis on competence and cognitive learning outcomes. The newly published administrative regulations of "Formal Education Curriculum Framework" [19], which is being implemented for the first time in the current school year of 2015/2016 in kindergartens, recognises the gap between pedagogy and practice in early years education. Educational reformers are urging schools to take into consideration the level of physical and intellectual development of infants, and "for the sake of avoiding the tendency of infant education being primary-like education [it is] specified that students of K1 should not be required to learn writing" [20]. The government intends to use the new policy to persuade private schools to reduce traditional teacher-centred and rote learning approaches to education that are permeating all levels of the private schooling system including kindergarten. The "Curriculum Framework" [19] stresses the need to match curriculum with age-specific characteristics and accommodate students' individual needs. However, the Education and Youth Affairs Bureau also promotes the "cultivation of talents", and regularly organises interschool activities promoting and reinforcing meritocracy and competitiveness. The utilitarian view of education with a Confucian influence is apparent in official discourse, such as the 2015/2016 New Year speech: "the DSEJ continues to support students to attend specific professional programs through several subsidy schemes in the new academic year, in order to nurture talents for the development of Macao" [21].

Early investment in education is not unique to Macao. On the contrary, it is usual in Asian countries. For instance, according to Lee, Super and Harkness [22], Korean children tend to be more advanced in school-related skills than their US counterparts, and "parents in Korean society have traditionally believed that children should be educated from an early age" (p. 135).

It seems that the education system in Macao shares some of the characteristics identified by Sharma, Forlin, Deppeler and Guang-xue [23] in other Asian regions, such as exam oriented curricula, didactic teaching practices, extensive homework expectations, and a school "eliteness" due to an hierarchical banding system starting on formal education. The pressure for success and academic achievement seems to start early in kindergarten education.

There are other social determinants of self-perception, such as, for instance, the children’s home environment. The gaming and tourism industry in Macao employs 25 per cent of the population [24], encompassing a large number of shift work activities. The changes in family functioning and home environment due to the irregular schedules of parents, such as those working shifts in casinos and hotels, might affect children’s self-perceived competence and acceptance in both social and cognitive domains [22].

The current study addresses all the above issues through researching a group of Macao kindergarten schoolers’ self-perceived competence and self-perceived social acceptance.

## II. METHOD

### A. Participants

The participants were 44 children, attending kindergarten third grade (K3) in one private kindergarten in Macao. At the time of the interviews the participants had a mean age of 69 months (min. 63; max. 75). Twenty-three (52,3%) of the participants were boys, and twenty-one (47,7%) were girls. Twenty-eight (63,6%) of the participants were Chinese and sixteen (36,4%) were non-Chinese.

### B. Instruments

Children were interviewed using The Pictorial Scale of Perceived Competence and Social Acceptance for Young Children [6], [25]. This scale contains four separate subscales: 1. Cognitive competence; 2. Physical competence; 3. Peer acceptance; 3. Maternal acceptance. Each subscale contains six items, with a total of 24 items. Each item is scored on a four-point scale, where a score of 4 would be the most competent or accepted and a score of 1 indicates the least competent or accepted. The factor analysis of the study of Harter and Pyke [6] indicates 2 independent factors: perceived competence, defined by the two subscales, cognitive and physical; perceived acceptance, defined by the peer acceptance and maternal acceptance subscales. The structure of this scale seems to be valid regardless of SES [7].

### C. Procedure

After the authorization of the school principal and informed consent from the parents, the data were collected by trained interviewers. Children were interviewed in a single session during their lunch time. Participants were asked to go to their classroom with the interviewer, to “play a game”, while their peers were in the cafeteria or in the playground. Interviews followed instructions in the manual of the instrument [25].

### D. Data Analysis

Data were analysed using the IBM SPSS Statistics 22 package. Descriptive statistics has been used, a paired samples t test and the Mann-Whitney u non-parametric test for independent samples, adopting a confidence level of 95%.

## III. RESULTS

The mean and the standard deviation were computed for the 2 factors and for the 4 subscales (Table I).

TABLE I. MEAN AND STANDARD DEVIATION OF THE 2 FACTORS AND THE 4 SUBSCALES OF HARTER PICTORIAL SCALE

	<i>M</i>	<i>SD</i>
<b>Perceived Competence</b>	3.29	.40
<b>Perceived Acceptance</b>	2.78	.55
Cognitive Competence	3.52	.33
Peer Acceptance	2.67	.69
Physical Competence	3.06	.59
Maternal Acceptance	2.89	.55

In general, the participants show higher results on the competence scales and lower on acceptance scales.

A paired samples t test indicated a significant difference between children’s perception of their “Competence” and perceptions of “Acceptance” ( $p < .01$ ). See Fig. 1 for the distribution of scores on Perceived Competence and Perceived Acceptance.

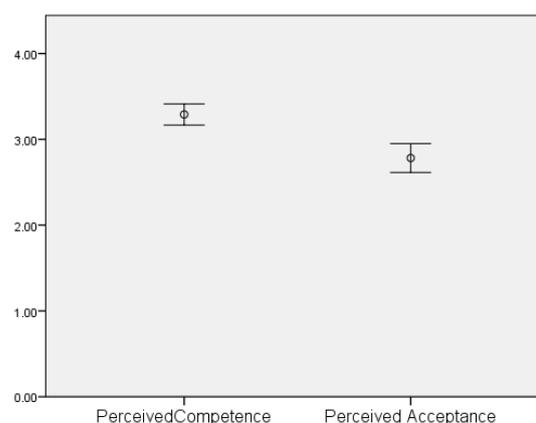


Figure 1. Distribution of the results on perceived competence and perceived acceptance

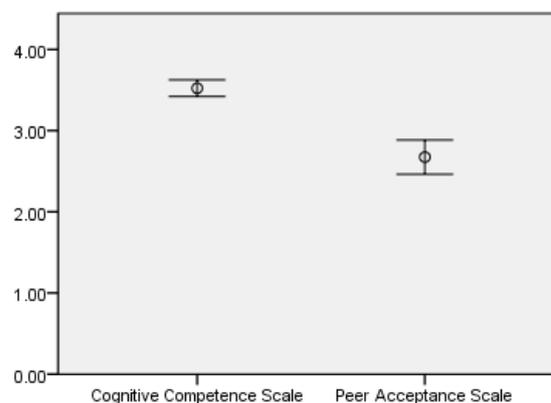


Figure 2. Distribution of the results on the cognitive and peer acceptance scales

The highest values are on “Cognitive Competence” and the lowest on “Peer Acceptance”. A paired samples t test indicated a significant difference between children’s

perception of their “Cognitive Competence” and perceptions of “Peer Acceptance” ( $p < .05$ ). See Fig. 2 for the distribution of scores on Cognitive Competence and Peer Acceptance.

Factor score differences between boys and girls were tested using the Mann-Whitney U Test for independent samples. No significant differences were found between boys and girls on “perceived competence” or “perceived acceptance” (see Table II).

TABLE II. MEAN DIFFERENCES BETWEEN BOYS AND GIRLS ON THE 2 FACTORS AND 4 SUBSCALES OF HARTER PICTORIAL SCALE

	Boys (N=23)		Girls (N=21)		U Sig.
	M	SD	M	SD	
<b>Perceived Competence</b>	3.25	.41	3.33	.39	.479
<b>Perceived Acceptance</b>	2.75	.67	2.81	.39	.646
Cognitive Competence	3.46	.37	3.60	.28	.206
Peer Acceptance	2.50	.83	2.85	.46	.106
Physical Competence	3.04	.62	3.07	.58	.943
Maternal Acceptance	2.99	.59	2.78	.49	.210

Data also shows that there are no significant differences between boys and girls in the four scales of competence and acceptance.

Factor score differences between Chinese and non-Chinese were tested using the Mann-Whitney U Test for independent samples. No significant differences were found between Chinese and non-Chinese children on “perceived competence” or “perceived acceptance” (see Table III).

TABLE III. MEAN DIFFERENCES BETWEEN CHINESE AND NON-CHINESE ON THE 2 FACTORS AND 4 SUBSCALES OF HARTER PICTORIAL SCALE

	Chinese (N=28)		Non-Chinese (N=16)		U Sig.
	M	SD	M	SD	
<b>Perceived Competence</b>	3.28	.45	3.29	.31	.826
<b>Perceived Acceptance</b>	2.79	.56	2.75	.54	.494
Cognitive Competence	3.51	.34	3.53	.32	.921
Peer Acceptance	2.73	.67	2.57	.74	.548
Physical Competence	3.05	.67	3.06	.42	.515
Maternal Acceptance	2.86	.56	2.93	.53	.598

Data also shows that there are no significant differences between Chinese and non-Chinese in the four scales of competence and acceptance.

#### IV. DISCUSSION AND CONCLUSION

Past research findings pointed out that kindergarten pre-school students express a positive self-concept with a propensity to report relatively positive feelings of competence and social acceptance [6]. This research tends to support research indicating positive feelings of competence and social acceptance in pre-school children [3].

The significant difference between the competence and acceptance scales (with higher values on competence

scales), is also consistent with the findings of Harter and Pike [6]. In this study the result is particularly higher in perceived “cognitive competence” and lower on perceived “peer acceptance”. The current findings point out the value attributed to competence by the children’s ecological environment to the detriment of social dimensions and interpersonal relationships. The findings of the current study seem to corroborate other empirical studies developed in Asian educational contexts [19]. In future research may be worth to include cultural factors to shed light on the link between the children’s ecological environment and their perceptions of competence and social acceptance. Specifically, it is important to understand how this focus on academic achievement and cognitive competence will affect the various dimensions of self concept of Macao’s children and adolescents. This result also highlights the importance of reflecting on the schools’ role as a place where opportunities for interaction with peers occur. Conversely, the lack of informal social contacts with peers outside school is apparent.

Analyzing children’s cultural background, the results didn’t show significant differences between the Chinese and the Non-Chinese in the different measures of competence and acceptance. This result seems to confirm the findings of Samuels and collaborators [12] suggesting that ethnic differences are not important in the various dimensions of self-concept. It also seems to reflect the importance that Asian cultures give to academic success [23]. Assuming that the various dimensions of children’s ecosystem are having reciprocal effects on each other [1], [2], it would be important to find which one is more important: the family cultural background or the social environment that surrounds the child? Our data suggests that social environment prevails over the family cultural background. Further studies are required in order to assess how disparate cultural backgrounds affect children’s perceived competence and social acceptance.

It would be also important to understand how aspects of home environment such as parenting, family income, access to resources and opportunities for interaction, that are essential for child development, influence children’s perceived competence and acceptance. For instance, the current data reveals that boys have a more positive perception about their mothers going out with them for a walk and undertaking visits to selected sites – could it be the case that mothers of kindergarten children make a positive differentiation of their male children? Or are boys just more satisfied with the opportunities they have to go out and do visits to sites with their mothers, even if, objectively, they have the same amount of time spent with their mothers as girls? Studies about children’s time use and parental involvement would contribute to a better understanding of family influences in children’s development of self.

The current study does not show significant gender differences on the competence and acceptance scales. This finding seems to contradict other research findings stating that girls usually have lower scores than boys on self-esteem measures [4]. Assuming that, self-esteem

changes in childhood [9], and that “children generally perceived their cognitive competence to be lower with increasing age, and that girls at the older ages increasingly perceived their cognitive competence to be lower than did boys” [22] (p. 140), it would be important to understand how this will develop in this population. This is particularly important taking into account that in Asian countries the educational system becomes more difficult and competitive with grade increasing [22].

The findings of the current study corroborate the original studies from Harter and Pike [6], giving foundation for the applicability of this instrument in this culture. However, the Harter instrument should be adapted to fit cultural expectations for children’s cognitive and social competence in the particular context of Macao. Such adaptations were included by researchers who have applied the Harter and Pike instrument to different cultures. For instance, Lee and collaborators [22] have done it in their study of Korean children’s self-perception of competence. Thus, an adaptation of the pictorial format to themes and situations more in tune with the social and cultural environment of Macao children is recommended.

As an exploratory study, the number of participants in the current study was a significant limitation. However, the findings may contribute to define lines for further research on a topic that crosses and is relevant to the disciplines of child psychology and educational psychology. The study also sheds light on the significance of culture and the need to develop cultural responsive research.

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