



Pursuing Quality in Early Childhood Education with a Government-Regulated Voucher: Views of Parents and Service Providers in Hong Kong

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Abstract

This paper critically examines the parents' and service providers' reception of the Pre-primary Education Voucher Scheme (PEVS) which was designed to enhance the quality of early childhood education in Hong Kong. The PEVS was a universal voucher policy that was designed to harness market forces and increase direct governmental control of quality in a private education market wherein pre-academic training and competition are strongly emphasized. This paper presents the results of a survey of 413 parents and 215 preschool service providers. Findings indicated that despite the government's efforts in promoting quality as 'child-centeredness' and the efforts of preschool service providers in meeting the quality standards, parents remained relatively neutral about the influence of the PEVS on preschool quality. However, all parents appreciated the financial benefits they accrued from the PEVS and more socially-advantaged families allocated the additional disposable income on extra educational activities and programs for their children. Findings suggest the implementation of the PEVS in a fully private market might unexpectedly exacerbate inequity in educational opportunities. The enrolment size of the preschool was also found to be a determinant of respondents' views of the PEVS. We argue the government's idea of 'joyful learning' maybe even more difficult to achieve with the current means of service governance.

(207 words)

Keywords: Early Childhood Education, Preschool Voucher, Quality, Market, Hong Kong

Pursuing Quality in Early Childhood Education with a Government-Regulated Voucher: Views of Parents and Service Providers in Hong Kong

Early childhood education (ECE) has become a focus of a new wave of global education reform due to recent empirical findings on its potential in providing higher rates of human capital return compared to investment at any other time of life (Heckman and Masterov 2007; OECD 2015, 2017). United Nations' (2015) Sustainable Development Goal Target 4.2 specifies the need for governments worldwide to ensure that all young children have at least one-year free 'quality early childhood development, care and pre-primary education so that they are ready for primary education'. Unlike school education, which has been widely held to be a public responsibility and in which market-based reforms have been carried out extensively around the world in the past 30 years (Clarke 2014; Rizvi and Lingard 2010; Taylor et al. 1997; Wilkins 2015), the care of preschool children has traditionally been viewed as the private responsibility of the family and charitable organizations (Magenheim 2001). The highly fragmented and decentralized system of ECE has been a challenge for many jurisdictions when considering approaches to improve the quality in the ECE marketplace which in many cases has already developed its own order and patterns. While reforms in school education are often contentious and have generated numerous educational debates, only limited comparative analyses of early childhood services and their outcomes have been carried out.

Against the background of global interest in ECE, the Hong Kong Special Administrative Region (HKSAR) government implemented an education voucher policy, entitled the Pre-primary Education Voucher Scheme (PEVS), to enhance the quality and affordability of ECE in Hong Kong in 2007 (Education and Manpower Bureau 2006a, 15-16), but had to eventually replace it with the new Free Quality Kindergarten Education Scheme (FQKES) in 2017 due to various unintended consequences (Education Bureau

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3 2016a). The PEVS, which represented the beginning of the HKSAR government's ECE
4 reform, was a unique education voucher program that provided a direct fee subsidy to all
5 parents of children between the ages of 3 and 6 but limited the encashment of the vouchers to
6 only certain types of private preschools and these preschools had to also meet government
7 standard for quality. During its 10 years of implementation, a limited number of empirical
8 studies, conducted by both advisory bodies to the government (e.g., Audit Commission 2013;
9 Education Commission 2010) and local academics (e.g., Lee and Bagley 2017; [name deleted
10 to maintain the integrity of the review] 2010; Yuen 2015; Yuen and Grieshaber 2009; Yuen
11 and Lam 2017), showed both merits and faults of the PEVS. Stakeholders debated whether
12 the PEVS was an effective policy tool that elevated the quality of the long-neglected ECE
13 sector or an initiative that curtailed the choice of parents. We argue that these debates were
14 the result of divergent views of the notion of ECE quality held by researchers, the
15 government, consumers (i.e., parents), and service providers in Hong Kong.

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17 This paper considers the parents' and ECE service providers' reception of the PEVS
18 in the pursuit of quality early childhood education in Hong Kong. The paper begins by
19 providing a background and context for the implementation of the PEVS. It then considers
20 the notion of quality in ECE under the PEVS. The arguments are further analyzed against
21 empirical data on the perception of the implementation of the voucher policy of both the
22 consumers (i.e., parents) and producers (i.e., ECE service providers) in the Hong Kong ECE
23 market. It concludes with a discussion around the pursuit of quality under the PEVS and
24 expands this to consider implications for the FQKES in Hong Kong and ECE reforms in
25 other contexts.

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Background

Early Childhood Education in Hong Kong before the Voucher

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Until the introduction of the FQKES, which adopts the term ‘kindergarten education’, the HKSAR government often used ‘early childhood education’ or ‘pre-primary education’ interchangeably to refer to education and care services provided by kindergartens (which enroll children between the ages of 3 and 6). The term ‘pre-primary education’ was used to denote services provided by two types of preschools: kindergartens and child care centers (which enroll children below 3) in Hong Kong (Education Commission 2000). This reflected the fact that child care centers, which were under the remit of the Social Welfare Department, only account for a very small portion (currently around 30) of the sector and the vast majority of ECE providers in Hong Kong were kindergartens (about 1000) that were overseen by the Education Bureau (EDB). In this paper, we use the term ECE to refer to services provided to children ranging in age from 3 to 6 years, provided in kindergartens or kindergarten-cum-child care centers.

ECE in Hong Kong has been offered exclusively by private providers, either non-profit-making kindergartens (NPMKs, which constitute about 80% of kindergartens) or private independent kindergartens (PIKs, which account for about 20% of kindergartens). The government controls the operation and quality in terms of adult-child ratios, space per child, materials, and equipment of all kindergartens through the dispersion of licenses that are required to operate a kindergarten. Before the introduction of the PEVS in 2007, NPMKs received very limited funding support (such as tax exemption, rental reimbursement, and other financial assistance) from the government. The NPMKs were allowed to retain a small profit margin of 5% but these profits needed to be re-invested in education. They also had to pay their teachers according to the salary scale recommended by the government. PIKs were not supported financially by the government but could have a profit margin of 10%. The majority of places (72.5%) were half-day program places (15-hours of preschool per week), but whole-day program places (35 hours per week including lunch and nap time) were also

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3 available (27.5%) (Education Bureau 2012). Around 50% of local NPMKs operated both
4 half-day and whole-day programs, 31% operated solely whole-day programs, and 19%
5 operated solely half-day programs (Committee on Free Kindergarten Education 2015).
6
7 Enrolment sizes varied greatly among kindergartens: 40% enrolled less than 100 students,
8 30% enrolled 100-199 students, 17% enrolled 200-299 students, and 13% enrolled 300 or
9 more students (Audit Commission 2013). Till today, ECE is still not compulsory in Hong
10 Kong but free half-day kindergarten education is an entitlement for all children from 3 to 6
11 years (Education Bureau 2016a).
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21 The government had long been criticized for taking a laissez-faire approach and
22 paying minimal attention to the ECE sector ([name deleted to maintain the integrity of the
23 review] 2009; [name deleted to maintain the integrity of the review] 2015). In fact, in the
24 2006/07 academic year, right before the launch of the PEVS, the government expenditure on
25 pre-primary education was merely HK\$1.2 billion¹ (2.9% of the government's education
26 budget), compared to HK\$10.2 billion (22.8%) and HK\$16.3 billion (36.5%) for primary and
27 secondary education, respectively (Census and Statistics Department 2017a). Tuition fees
28 were high among both NPMKs (on average HK\$13,969 and HK\$27,300 for half-day and
29 whole-day programs, per student per annum, respectively) and PIKs (on average HK\$22,086
30 and HK\$34,017) (Census and Statistics Department 2003). Even so, the demand for ECE was
31 exceptionally high by international standards. Kindergarten enrollment rate was already 98%
32 in 2006 (HKCECES 2006) and consistently found to be over 100% in the past 5 years,
33 meaning some children attended more than one kindergarten (Committee on Free
34 Kindergarten Education 2015; UNESCO Institute for Statistics 2018).
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1 US\$1 = HK\$7.78

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3 Classroom activities in Hong Kong kindergartens were known to be structured,
4 academically-oriented and teacher-centered ([name deleted to maintain the integrity of the
5 review] 2009), despite the fact that both NPMKs and PIKs were advised to formulate their
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Classroom activities in Hong Kong kindergartens were known to be structured, academically-oriented and teacher-centered ([name deleted to maintain the integrity of the review] 2009), despite the fact that both NPMKs and PIKs were advised to formulate their own curricula based on the government's *Guide to the Pre-primary Curriculum* (was updated to be the *Kindergarten Education Curriculum Guide* in 2017), which stressed the importance of 'child-centeredness' and 'all-round development' and included the learning domains of ethics, intellect, physique, social skills, and aesthetics, to support the healthy and happy development of children (Curriculum Development Council 2006). Until 2005, only 23.8% of kindergarten teachers had a certificate-level qualification, and only 12.8% of kindergarten principals received a Bachelor's degree (Education and Manpower Bureau 2006a). Nonetheless, Hong Kong's ECE system was one of the most high-performing in the world in terms of learning outcomes, especially in areas of prewriting and early number skills (Opper 1996).

The Hong Kong ECE Voucher

In September 2007, the HKSAR government committed to investing HK\$2 billion per annum to implement the PEVS and a series of new initiatives to provide 'quality education for our next generation' and '[ease] the financial burden of parents' (Education and Manpower Bureau 2006a, 15-16). Essentially, the government provided an annual non-means-tested and flat-rate subsidy in the form of a voucher to all parents of kindergarten-aged children to meet part of the school fees. The initial value of the voucher in 2007/08 was HK\$13,000 per student per annum, gradually increased to HK\$23,230 per student per annum in 2016/17 to compensate for inflation (Education and Manpower Bureau 2006a; Education Bureau 2016b). The recommended normative salary scale for NPMK teaching staff was abolished to allow NPMKs to have greater flexibility to offer salaries that were 'commensurate with the prevailing market situation' (Education and Manpower Bureau

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3 2006a). By 2016/17, the 10th anniversary of its implementation, the government expenditure
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5 on ECE had increased by 241% (HK\$4.1 billion) and raised to 5.5% of the total education
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7 budget, which had only increased by 69.3% (HK\$75.5 billion) (Census and Statistics
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9 Department 2017a).

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12 An education voucher — a tied demand-side subsidy and publicly-funded coupon
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14 redeemable by a parent at any school which meets certain minimum standards — has been
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16 theorized to instill market competition in order to improve the quality of education (Bowe,
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18 Ball, and Gold 1992; Gois 2010; Taylor et al. 1997). The central idea is based on the
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20 neoliberal assumption that the older bureaucratic structures and practices of the state are
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22 inefficient, expensive, and incapable of responding quickly to rapid changes in the society,
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24 while commercial activities in the market are viewed the most efficient methods for
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26 producing and supplying goods and services (Gois 2010; Taylor et al. 1997). By enhancing
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28 their purchasing and bargaining powers through vouchers and increasing the transparency of
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30 information, parents are empowered and ‘freed’ to choose schools, public or private, that are
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32 ‘good’ for their children. Meanwhile, governments often devolve their managerial
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34 responsibilities, thus both public and private schools will compete to provide services that are
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36 most suitable to the needs of parents and students, leading to more cost-effective educational
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38 outcomes (Daniels and Trebilcock 2005; Steuerle 2000). Indeed, there have been a few
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40 voucher-typed programs in ECE implemented overseas, including the Nursery Voucher
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42 Program of the UK, Georgia’s Pre-Kindergarten Program, the Cleveland Scholarship and
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44 Tutoring Program of the USA, and the School Choice of Sweden. But as in the case of
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46 vouchers in school education, there is still no conclusive evidence to show that the reliance
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48 on the market competition is able to support the enhancement of quality in ECE (see: Coulter
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50 1995; Henry et al. 2003; Holland 2003; Levin and Schwartz 2007; Pathak et al. 2001; Raden
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52 1999; Sparkes and West 1998; The Southern Education Foundation 2008; Tiger 2005; United
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3 States General Accounting Office 2001). The introduction of the PEVS further complicated
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5 the debate.
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8 Even though it was still a universal, state-funded, and demand-side subsidy which did
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10 not restrict the eligibility of children based on conditions such as family income levels,
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12 failing students, children with special needs or under foster care, the PEVS had four unique
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14 aspects: (a) it was applied in an already active and competitive education market with almost
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16 100% enrolment, and wherein students tended to be high achievers in cross-national tests on
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18 academic achievement; (b) only NPMKs that charged a tuition fee not exceeding the tuition
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20 ceiling could receive funding from the government with the vouchers they received from
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22 parents, albeit both NPMKs and PIKs in Hong Kong were private preschools; (c) the
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24 government specified that during the first 4 years of implementation (i.e. 2007/2008 to
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26 2010/2011) a portion of the voucher subsidy had to be spent on upgrading the professional
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28 qualifications of teachers and principals, who had to complete certificate- and Bachelor's
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30 degree-level training, respectively by the 2011/2012 school year; and (d) the PEVS tied
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32 service quality to performance indicators set by the government with the mandatory Quality
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34 Assurance (QA), which consisted of self-evaluation and official inspection. The QA reports
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36 were uploaded for the public to view and only those NPMKs that passed the QA could
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38 continue to redeem the vouchers under the PEVS from the 2012/2013 school year. A '3-year
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40 transitional period' until the end of the 2009/10 school year was arranged for PIKs satisfying
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42 the prescribed requirements of voucher NPMKs to redeem the vouchers and apply for
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44 conversion to non-profit-making status (Education and Manpower Bureau 2006b). In other
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46 words, unlike the voucher-typed programs mentioned above where devolution and
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48 decentralization have been at the core of reform agendas (Mok 2003; Rizvi and Lingard
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50 2010), Hong Kong was undertaking a reversed process through the PEVS, which provided a
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3 direct pathway for the government to influence the private ECE sector through both the
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5 market forces and governmental QA activities.
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8 **Quality of ECE in the Face of the PEVS**

9 ***Structural vs. Process Quality of ECE***

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12 Despite the fact that the definition of preschool quality is contested, the professional
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14 literature discusses preschool quality by considering both structural and process dimensions
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16 (Bonetti and Brown 2018; Cryer et al. 1999; Hu et al. 2017; OECD 2015; [name deleted to
17
18 maintain the integrity of the review] 2009; Slot et al. 2015). Structural quality features refer
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20 to those that are measurable and regulated. Those generally agreed upon in the literature (see:
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22 Bonetti and Brown 2018) include resources and facilities, teachers' qualifications and wages,
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24 management practices, etc. In contrast, process quality relates to the more proximal features
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26 of ECE provisions that may have a direct effect on program-level and classroom-level
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28 teaching and learning and is concerned with educational activities, teacher-child interaction,
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30 and even home-school relationship. Structural quality can be raised by increasing the
31
32 stringency of requirements for the registration and operation of preschools while process
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34 quality can be enhanced most prominently through professional development activities for
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36 teachers, since they are the ones who organize the classroom, provide activities for children,
37
38 management personal care routines, and interact with children (Cryer et al. 1999; Slot et al.
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40 2015). A number of influential studies have shown that higher teacher qualifications are
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42 significantly and positively correlated with higher process quality in early childhood
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44 education and care (Manning et al. 2017; OECD 2011, 2015). Studies on the relationships
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46 between the structural aspects of quality (e.g, teacher: child ratio) and process quality have
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48 shown positive, yet sometimes weak associations (Cryer et al. 1999; Slot et al. 2015).
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51 Regardless, high structural quality (e.g., teacher qualifications) is assumed to set the stage for
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53 high process quality.
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3 The PEVS sought to improve the structural quality mainly by tightening control on
4 physical settings (through quality inspections of the QA) and raising the professional
5 qualifications of kindergarten teachers and principals. By making most teachers and
6 principals complete the training requirements within a few years, it was presumed that they
7 would be able to improve the process quality by performing according to the performance
8 indicators, which set the ‘standards of quality’ of kindergartens in Hong Kong and of which
9 the QA activities were built upon. The performance indicators were formulated based on a
10 developmentalist perspective and in accordance with core values of all-round development,
11 child-centeredness, play-based curricula and pedagogies, and happy learning ([name deleted
12 to maintain the integrity of the review] 2009; Yuen and Griesber 2009). It contrasted sharply
13 from the authoritarian, academically-oriented, and child-unfriendly curricula and practices of
14 which Hong Kong kindergartens were famous for even though they were condemned by
15 many scholars (e.g., Chan and Chan 2002; Fung and Lam 2009; Opper 1996; [name deleted
16 to maintain the integrity of the review] 2006; [name deleted to maintain the integrity of the
17 review] 2009; Yuen 2005) as inappropriate for children at such young ages and might weaken
18 their overall development in a long run. For instance, the performance indicators prohibited
19 the use of dictations, tests, and examinations and pointed out the importance for teachers to
20 establish a good relationship with children through active participation in their play
21 (Education Department and Social Welfare Department 2001).
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47 The PEVS, however, portrayed a conflicting force on, at least the process dimension
48 of, quality against the existing market notion of quality. Within the Chinese culture,
49 childhood is viewed as a time of training with copious exercises to develop skills (Biggs
50 1992; Chua 2011; [name deleted to maintain the integrity of the review] 2009; Watkins
51 2009). A ‘good’ kindergarten is one that can prepare the development of these skills and
52 facilitate children to get into ‘good’ primary schools, which open the door to ‘good’
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3 secondary schools and universities. Parents in Hong Kong were trying to get ahead of the
4 game by to give their children a competitive edge in the race for limited school places (Chan
5 and Chan 2002; Cheung 2009; Fung and Lam 2009; Ng 2013; [name deleted to maintain the
6 integrity of the review] 2006; [name deleted to maintain the integrity of the review] 2009;
7 Yuen 2005). Notwithstanding the fact that the EDB actively publicized the official stance on
8 the quality of ECE through a wide range of media, the results of an interview study with 86
9 Chinese parents with children aged 3 who had just undergone the process of selecting a
10 kindergarten for their children for the academic year 2007/08 found that, although parents'
11 expressed views on quality resembled the 'happy child' image the government was
12 promoting, they at the same time looked for an academic curriculum and pedagogy that
13 would ease their children's transition to more difficult primary schools. This struggle was
14 commonly found across different income groups and educational levels, but parents with
15 lower incomes had a slightly higher tendency to define quality in terms of academic learning
16 (Yuen and Griesber 2009). In this relatively free ECE market that relied predominantly on
17 school fees paid by parents, introducing as many academic components and a teacher-
18 centered and highly structured pedagogy seemed to be the best strategy for many
19 kindergartens, especially PIKs, to satisfy their consumers (Chan and Chan 2002). This was
20 positively reinforced by their popularity among parents.
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Constraints of Kindergartens in the Pursuit of Quality under the PEVS

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47 The assumption behind the education voucher suggests that schools favored by
48 parents will be rewarded with financial resources and opportunities for expansion. However,
49 many critics of PEVS pointed out that some high-quality kindergartens would not be
50 favored by parents because of the design of the voucher.
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56 The most prominent criticism of the PEVS, stood by even the arguably 'father of
57 today's education reform movement' Milton Friedman himself, was it limited the eligibility
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3 of redemption of vouchers to NPMKs (*Apple Daily* October 12, 2006; Sung 2006a, b, c) and
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5 officially aggravated unequal opportunity and parental choice in the wholly private ECE
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7 sector (*South China Morning Post* October 28, 2006). In defense of the government's
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9 proposal of not subsidizing PIKs, the government repeatedly pointed out that PIKs often
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11 inappropriately overloaded their curricula to prepare young children for primary schools and
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13 questioned their low transparency in operations (Wardlaw 2006; Ngai and Leung 2006).
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15 Instead, PIKs were encouraged to convert to non-profit-making status so that they would be
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17 monitored under the QA. Standalone or small-scale PIKs had no choice but to undergo
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19 structural and operational changes within a short period of time in order to obtain the non-
20
21 profit-making status in order to survive. Opponents, hence, saw the PEVS simply as a
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23 mechanism for the government to seize the control of the private ECE sector (*Apple Daily*,
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25 October 12, 2006; Sung 2006a, b, c).

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31 The PEVS was also attacked due to its flat-rate design, which could be unfair to
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33 whole-day kindergartens and parents in need of whole-day services (Education Commission
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35 2010; Legislative Council Secretariat 2009a, 2009b; [name deleted to maintain the integrity
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37 of the review] 2015). Earlier, Yuen (2015) conducted a study on choice practices of mothers
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39 of kindergarteners and found that those of lower SES and working mothers preferred using
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41 whole-day services to help them manage care responsibilities and household resources.
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43 Various kindergartens and teachers organizations (e.g., Hong Kong Early Childhood
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45 Educators Association 2006; Hong Kong Federation of Education Workers 2006) pointed out
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47 that kindergartens providing whole-day services had an equal, if not greater, need to upgrade
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49 their professional qualification, but could be jeopardized under the PEVS because they would
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51 receive significantly less teacher development subsidy comparing to their counterparts which
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53 offer two half-day (morning and afternoon) sessions each day.
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3 The flat-rate design and the fact that the calculation of the subsidy on a per-student
4 unit cost basis could further place small-scale kindergartens at a disadvantage. Kindergartens
5 with smaller enrolment sizes might lead to lower salaries and fewer teacher development
6 opportunities compared to those with more students enrolled. Unlike the modes of operation
7 (i.e., NPMKs vs. PIKs), the programs offered (i.e., whole-day vs. half-day) and the sizes of
8 enrolment could hardly be changed in view of the demand of parents, safety and classroom
9 space regulations, limited land supply, and the skyrocketing rental prices of Hong Kong. *The*
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19 ***Present Study***

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21 The seemingly paradoxical nature of the PEVS — on one hand making use of the
22 market forces to increase competition among kindergartens and compel them to meet the
23 government-led view on quality; on the other hand, such a view was working against the
24 existing market notion of quality, making it an interesting case for investigation and
25 contribution to our knowledge of the use of market forces in education reforms. Framed as a
26 ‘direct fee subsidy for parents’ (Education and Manpower Bureau 2006a), did the actual
27 consumers and providers of the Hong Kong ECE market notice the HKSAR government’s
28 agenda? How did they perceive the PEVS? And more importantly, how did they generally
29 feel about the impacts of the voucher policy on their own kindergartens in terms of structural
30 and process quality? Moreover, as many had argued that the unequal (and equal) distribution
31 of resources under the PEVS might lead to much unfairness for consumer and producers of
32 (1) voucher kindergartens which were converted from PIKs, (2) whole-day kindergartens, and
33 (3) small-scale kindergartens, how did their perceptions of the PEVS differ from their peers?

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51 Unfortunately, the above questions remained unanswered. Despite the fact that the
52 PEVS has generated many policy debates, there is a dearth of empirical investigations that
53 addressed the above issues from the angles of the consumers and providers of the Hong Kong
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3 ECE market. Reviews or studies on the PEVS often took a broad-brush perspective in
4 assessing the PEVS (e.g., Audit Commissions 2013; Education Commission 2010),
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6 acknowledging the overall benefits including the facts that overall 90% of teachers were
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8 trained with certificate level or above, all voucher kindergartens passed the QAs, and the
9
10 general accountability of kindergartens was improved. Few employed a more nuanced view
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12 on the development and implementation of the voucher policy. The limited body of research
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14 focused predominantly on how parents made choices of kindergartens using vouchers (see:
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16 Lee and Bagley 2017; Yuen 2015; Yuen and Grieshaber 2009; Yuen and Lam 2017). [Name
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18 deleted to maintain the integrity of the review] (2010) conducted a survey with 380
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20 respondents in 2007 right after the implementation of the PEVS and found kindergarten
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22 principals and teachers were significantly less satisfied with the voucher reform than parents,
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24 but follow-up studies on possible effects that emerged after some time of the implementation
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26 could not be located.
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33 The present study, thus, was conducted three years after the implementation of the
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35 PEVS to empirically capture and examine the views of 628 consumers and providers of the
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37 Hong Kong ECE market to allow a more comprehensive understanding of the notion of
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39 quality in the face of market-based ECE reform. Informed by the above review, this study
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41 aimed to answer three questions:
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45 1. How did the consumers (i.e., parents) and ECE service providers (i.e., teachers and
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47 principals) in Hong Kong perceive the PEVS? What were their observations and
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49 specific concerns?
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51 2. How were the changes in the quality of their kindergartens perceived?
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53 3. Overall, did their views differ by their roles, the pre-PEVS modes of operation, the
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55 programs offered, and the sizes of enrolment of their kindergartens?
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58 Methodology

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The Questionnaires

In order to obtain original views from a large number of respondents, three different sets of self-administered questionnaires — namely the Parent Questionnaire, the Principal Questionnaire, and the Teacher Questionnaire — were developed. The design of the questionnaires was informed (1) theoretically by employing the concepts of structural and process quality, and (2) practically by taking into account the different experiences and frames of references of parents, kindergarten principals, and teachers.

The initial pool of questions was drafted based on prior studies, consultation with principals, teachers, and parents, the actual policy statement, transcripts of official meetings, position papers by different parties, academic publications, and newspaper articles. The questions were then tested in a pilot study with 8 principals, 24 teachers, and 21 parents from 8 NPMKs, including 1 NPMK which transformed from a PIK after the implementation of the PEVS, to ensure they were clear and easy to understand, relevant to the context and able to reflect the special concerns of the three groups of respondents.

A further revision was made based on respondents' recommendations and discussion with experts. The final versions of the questionnaires consisted of three major parts:

1. The items in the Observations and Concerns part of the questionnaires were designed to reflect the observations and concerns of parents and kindergarten principals and teachers. Some of the items were developed in relation to the structural and process aspects of quality (e.g., 'the PEVS brought more resources, funds, and opportunities to your kindergarten'; 'the PEVS made the curriculum and teaching better meet the needs of you and your child'). Others were included based on the major arguments and debates on the PEVS. The number of questions varied depending on the roles of respondents (parents, principals, or teachers). All the items were rated on a 5-point

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3 Likert scale, thus the responses were recoded as integers from 1 to 5: ‘strongly
4 disagree’ = 1, ‘disagree’ = 2, ‘neutral’ = 3, ‘agree’ = 4, and ‘strongly agree’ = 5.
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- 7
8 2. The General Perception part comprised 6 questions that were common to all the three
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10 sets of questionnaires and served to evaluate respondents’ general perception of the
11
12 changes in quality brought about by the implementation of the PEVS. Questions
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14 included ‘Do you think the PEVS has enhanced the quality of your kindergarten?’ and
15
16 ‘Do you think kindergartens should be subjected to the government’s QA?’ All of the
17
18 questions followed a 5-point Likert-type format; with the exception of the sixth
19
20 question, a question that needed respondents to assign an overall score to the PEVS on
21
22 a 100-point scale, with ‘0’ meaning the policy was totally unacceptable, ‘50’ meaning
23
24 the policy was passable, and ‘100’ meaning the policy was perfect; and the first
25
26 question, a question which required respondents to rank ‘areas of change’ brought by
27
28 the PEVS in order of impact. These areas were in fact dimensions of structural and
29
30 process quality, including six areas of structural quality (resources and facilities,
31
32 management practices, tuition fee, teachers’ qualification, teachers’ salaries, and
33
34 teacher: child ratio) and five areas of process quality (teacher-child relationship,
35
36 classroom activities, out-of-class activities, pedagogy, and home-school relationship)
37
38 that were deemed relevant by most of the participants of the pilot study.
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44 3. The Future Development and Comments part contained two open-ended questions: (a)
45
46 ‘How do you generally describe the Pre-primary Education Voucher Scheme?’ and
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48 (b) ‘Based on your experience and understanding, what further improvements can be
49
50 made to the future development of the voucher scheme?’ The questions were common
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52 to all the three sets of questionnaires to allow respondents to express their opinions
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54 regarding the future development of the Hong Kong voucher policy and other
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56 comments they wished to add and were not covered in the prior two parts of the
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3 questionnaires. The questions, however, were specifically formulated without the
4
5 word ‘quality’ to see if the respondents would actually focus on quality or any other
6
7 aspects of the PEVS when they wrote about the policy in their own words.
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9

10 ***The Sample***

11 *Sampling of Kindergartens*

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14 A complete list of 761 PEVS-participating kindergartens in the 2010/11 academic
15
16 year was obtained from the EDB’s *Profile of Kindergartens and Kindergartens-cum-Child*
17
18 *care Centers* website. Stratified random sampling was employed to select around 10% of
19
20 kindergartens from the list according to the proportion of kindergartens in the four regions
21
22 classified by the EDB: Hong Kong Island, Kowloon, New Territories East, and New
23
24 Territories West. The median monthly domestic household income in Hong Kong Island
25
26 (HK\$28,000) was about 40-55% higher than those in Kowloon (HK\$18,000), in the New
27
28 Territories (HK\$20,000) and in entire Hong Kong (HK\$20,200) in 2011 (Census and
29
30 Statistics Department 2017b). Hong Kong Island also had the lowest percentage of PEVS-
31
32 participating kindergartens (57%), followed by Kowloon (72%), New Territories East (76%)
33
34 and New Territories West (88%). Due to the relatively low proportion of PEVS-participating
35
36 kindergartens in the region of Hong Kong Island, proportional stratified sampling was used
37
38 instead of simple random sampling to ensure kindergartens serving families in different
39
40 regions would be represented in the sample. The majority (73%) agreed to participate in the
41
42 study, regional response rates ranged from 68% to 77%. Among them, 16% were PIKs before
43
44 the implementation of the PEVS, and this is comparable with the EDB’s (2008) statistics that
45
46 14% of PIKs would have been converted to NPMKs by August 2008. About half (54%) of
47
48 the responding kindergartens offered both whole-day and half-day programs, 25% and 21%
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50 operated solely half-day and whole-day programs, respectively. The enrolment sizes of
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52 responding kindergartens varied: 33% enrolled less than 100 students, 28% enrolled 100-199
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3 students, 12% enrolled 200-299 students, and 26% enrolled 300 or more students. They were
4
5 not different from the 21 non-responding kindergartens in terms of kindergarten enrolments (t
6
7 = .229, $p > .05$) and the programs offered ($U = 583.00$, $p > .05$). Follow-up telephone calls were
8
9 made to non-responding kindergartens. ‘Heavy workload’ and ‘uninterested in participation’
10
11 were the two reasons most commonly cited for non-participation.
12
13

14 15 *Sampling of Principals and Teachers*

16
17 The principals of responding kindergartens were instructed to complete the Principal
18
19 Questionnaires and randomly select one class teacher from each of the K1 (3- to 4-year-olds),
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21 K2 (4- to 5-year-olds), and K3 (5- to 6-year-olds) grades to fill out the Teacher
22
23 Questionnaire.
24
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26 27 *Sampling of Parents*

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29 Considering the limited research manpower available, instead of randomly selecting
30
31 classes of parents in each of the responding kindergartens to fill out the Parent
32
33 Questionnaires, 3 kindergartens were randomly selected from each of the four regions (total:
34
35 12 kindergartens). In each of these kindergartens, the principal was asked to randomly select
36
37 two K2 and K3 classes and invite all the parents in the classes to participate in the study. This
38
39 ensured that the parents had over a year of experience with the voucher.
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42
43 A total of 53 principals, 162 teachers, and 413 parents, from the 57 responding
44
45 kindergartens, returned the questionnaires. The response rates for principals and teachers
46
47 were 68% and 69%, respectively. Almost all chosen parents returned the questionnaires to the
48
49 kindergartens. The response rates are considered high by Hager et al. (2003) after analyzing
50
51 17 studies based on mail surveys over a 6-year period in a leading non-profits research
52
53 journal, with an average return rate of 42-52%.
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56
57 The demographic information of the respondents is shown in Table 1 and Table 2.

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59 [Table 1 near here]
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[Table 2 near here]

Data Analyses

To answer the first research question, (a) exploratory factor analyses based on principle components analyses using SPSS22 were applied to the Observation and Concerns items to explore the major factors underlying the concerns of parents and ECE providers. Three to five items were eliminated in each type of questionnaires because they did not contribute to a simple factor structure and failed to meet minimum criteria of having a primary factor loading of .4 or above, or in one case, the removal of the item contributed to a substantial increase in internal consistency in terms of Cronbach's alpha. The resulting numbers of items for parents, principals, and teachers were 15, 16, and 18, respectively. The Kaiser-Meyer-Olkin measures of sampling adequacy were .73, .64, and .67 for parents, principals, and teachers, respectively, and Bartlett's tests of sphericity were significant ($p < .001$). The factors identified explained 75%, 65%, and 64% of the variance within Parent, Principals, and Teachers Questionnaires, respectively; (b) descriptive analyses were applied to the items to describe the tendency of agreement or disagreement; (c) an inductive strategy of constant comparative method (Corbin and Stauss 2008) was employed to look for emerging themes in respondents' answers to the open-end questions. A Ph.D. student who had 2-year teaching experience in a local kindergarten and 4-year research experience in ECE was asked to review the responses and the themes to validate the researchers' interpretation. Data were coded accordingly to quantify the responses and allow descriptive analyses.

Two sets of statistical analyses were applied to the questionnaire data to address the second and third research questions: (a) mean ranks were used to determine the general rankings of the choices in the rank order question, and Kendall's W s were used to evaluate how much the respondents agreed with each other; (b) one-way ANOVAs were applied to the

Likert-type and scoring items to investigate the between- and within-group commonalities and differences in the parents' and ECE providers' views of the PEVS.

Survey Findings

Observations and Concerns of Different Respondents

Parents

Table 3 shows the results of the exploratory factor analysis of the observations and concerns of parents. Six factors, namely 'relief of financial burden' (3 items; $\alpha = .87$; explained 27% of the variance), 'quality of learning and teaching' (2 items; $\alpha = .80$; explained 15% of the variance), 'government resources' (3 items; $\alpha = .65$; explained 11% of the variance), 'school accountability' (2 items; $\alpha = .78$; explained 8% of the variance), 'expectations on kindergartens' (2 items; $\alpha = .80$; explained 7% of the variance), and 'school choice' (2 items; $\alpha = .70$; explained 7% of the variance) were identified. Parents agreed on all the 'relief of financial burden' items. Results of a separate one-way ANOVA using average family income as grouping factor indicated that parents of all levels of family income gave an equally favorable response regarding the PEVS' effectiveness in relieving their financial burden, $F(9, 346) = 1.563, p = .125$. Meanwhile, they appeared to be more neutral about the policy's capability in enhancing the 'quality of teaching and learning' and 'school accountability', and negative to neutral about the 'government resources'. They were also neutral about the PEVS' influence on their choice of kindergartens and felt that their kindergartens were meeting their expectations.

[Table 3 near here]

It seemed that parents appreciated the PEVS mainly because of the financial benefits, as revealed in their answers to the two open-end questions. Seven discrete categories could be identified in their reports of their overall impressions of the PEVS ($n = 178$), most of which were deemed positive, a majority of parents described the policy as one that eased their

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3 financial burden and increased their choices (52%), but these choices could be kindergartens,
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5 ECE programs (half- or whole-day), an additional ECE program at another kindergarten, or
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7 other extra-curricular classes. In fact, 8% of the responding parents wrote that the PEVS had
8
9 helped them save money for tutorials and other extra-curricular classes. Some parents even
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11 wanted the government to subsidize tutorial classes, playgroups, and other extra-curricular
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13 activities (4%). Only 4% of the parents, however, commented that the PEVS was a policy
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15 that improved the quality of education which their child received at their kindergartens.
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19 *ECE Providers*

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21 Factor analyses on the observations and concerns of kindergarten principals and
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23 teachers identified four common factors: 'school operation and prospect' (6 items in the
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25 Principal Questionnaire, $\alpha = .72$, explained 21% of the variance; 5 items in the Teacher
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27 Questionnaire, $\alpha = .69$, explained 19% of the variance); 'workload and stress' (5 items in the
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29 Principal Questionnaire, $\alpha = .73$, explained 17% of the variance; 4 items in the Teacher
30
31 Questionnaire, $\alpha = .63$ that explained 10% of the variance); 'learning and teaching' (3 items
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33 in the Principal Questionnaire; $\alpha = .60$, explained 11% of the variance; 2 items in the Teacher
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35 Questionnaire, $\alpha = .44$, explained 6% of the variance) and 'government restrictions' (2 items
36
37 in the Principal Questionnaire, $\alpha = .60$, explained 9% of the variance; 3 items in the Teacher
38
39 Questionnaire, $\alpha = .50$, explained 7% of the variance) (Table 4 and Table 5). Both the
40
41 kindergarten principals and teachers were relatively neutral about 'school operation and
42
43 prospect' and about the PEVS' influences on 'learning and teaching', but agreed that the
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45 PEVS increased their 'workload and stress'. They also tended to disagree on the 'government
46
47 restrictions' items. In addition, the principals tended to agree that 'school accountability' (2
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49 items, $\alpha = .52$, explained 8% of the variance) was enhanced due to the implementation of the
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51 voucher policy. The teachers, on the other hand, tended to agree that the PEVS helped
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53 enhance their 'professional development and qualifications' (4 items, $\alpha = .65$, explained 13%
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3 of the variance) and relieve 'financial burden on parents (2 items, $\alpha = .70$, explained 9% of
4 the variance).
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8 [Table 4 near here]
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10 [Table 5 near here]
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12 While some ECE service providers agreed that the PEVS could help achieve the
13 policy goals of promoting the quality of ECE in Hong Kong (principals: 15%; teachers: 10%)
14 and easing parents' financial burden (principals: 6%; teachers: 5%), the significantly
15 increased workload and stress (principals: 28%; teachers: 27%), coupled with the risk of
16 having a salary that was not commensurate with their education and experiences (teachers:
17 13%), formed the overall impressions of the PEVS of many principals ($n = 47$) and teachers
18 ($n = 102$) in their responses to the open-end questions. As explained by one teacher:
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28 The PEVS introduced quality assessment and significantly increased our
29 workload. We do receive a fee subsidy for professional upgrading, but we are
30 also forced to complete the training before 2011. There are simply too many
31 restrictions and stresses. Even if we complete the training within the time
32 limit, what do we get? There could be no salary increase whatsoever.
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40 (Teacher 135).
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42 A large proportion of the principals (29%) and teachers (31%) in this survey asked for
43 a government-mandated salary scale that adequately considered their work experience and
44 professional and academic qualification. Other ECE service providers wanted more subsidies
45 and time for completing the training requirements (teachers: 14%), as well as more resources
46 and support to relieve their workload and stress (principals: 27%). Some principals (7%) and
47 teachers (6%) even suggested the government to include ECE in formal education and fully
48 subsidize ECE.
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58 *Perceived Changes in Kindergarten Quality* 59 60

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3 In terms of the changes in quality observed, changes in structural dimensions such as
4 tuition fees, resources and facilities, management practices, and teachers' qualifications, were
5 consistently ranked the most substantial by the respondents (Table 6). Significant Kendall's
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In terms of the changes in quality observed, changes in structural dimensions such as tuition fees, resources and facilities, management practices, and teachers' qualifications, were consistently ranked the most substantial by the respondents (Table 6). Significant Kendall's W s of .461, .477, .495, and .461 were found among parents, principals, teachers, and the entire sample, respectively ($df = 11, ps = .000$). According to Schmidt (1997), these indicated that there were moderate agreements within the three respondent groups and within the entire sample.

[Table 6 near here]

Respondents, in general, tended to be neutral to positive about these changes brought about by the PEVS, the easiness of adapting to these changes, and the policy's capability in enhancing the overall quality of their kindergartens (Table 7). Although significant differences were found between respondents of different roles, programs offered, pre-PEVS modes, and sizes of enrolment, the effect sizes (η^2 s $< .06$) were small according to Cohen's (1988) guidelines, with the exception of the sizes of enrolment on the perceived easiness of adapting to the changes, wherein a medium effect size ($\eta^2 = .10$) was observed, and post hoc comparisons using the Fisher's LSD test confirmed that respondents of the larger-scale kindergartens were more positive than those of the smaller-scale ones.

Regarding whether the respondents thought kindergartens should be subjected to government's QA, even though the respondents appeared to generally agree, the ANOVAs again showed significant differences between respondents of different roles, programs offered, and sizes of enrolment, but this time a large effect of the roles of respondents was found ($\eta^2 = .17$). Fisher's LSD comparisons showed that the parents were a lot more positive than ECE service providers, especially the teachers. Medium effect of the sizes of enrolment was also observed ($\eta^2 = .10$), and post hoc comparisons revealed the respondents of kindergartens with less than 200 students were more neutral than their peers.

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3 In terms of the respondents' scorings of the PEVS, the roles of the respondents and
4 the sizes of enrolment of their kindergartens showed a very large effect ($\eta^2 = .22$) and medium
5 effect ($\eta^2 = .12$), respectively. Fisher's LSD tests again showed that the parents perceived the
6 policy a lot more positively than did ECE service providers, and the respondents of
7 kindergartens with 200 or more students rated the policy much higher than those of smaller-
8 scale kindergartens. Significant differences were also found among the respondents of
9 kindergartens that offered different programs, but the effect size was considered small.

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19 [Table 7 near here]

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21 Further comparisons within the parent, teacher, and principal groups showed small,
22 although significant, variances within the parent and teacher groups in relation to the
23 programs offered, pre-PEVS modes of operation, and sizes of enrolment (Table 8). Within
24 the principals, however, the programs offered had large effects on whether the changes in
25 quality were perceived as positive ($\eta^2 = .17, p = .01$) and on the principals' overall scorings of
26 the PEVS ($\eta^2 = .15, p = .02$). Post hoc comparisons using Fisher's LSD test revealed that the
27 principals of kindergartens that offered whole-day programs exclusively tended to disagree
28 that the changes in quality were positive and rated the PEVS significantly lower than their
29 peers of kindergartens that offered at least some half-day programs. The sizes of enrolment
30 also largely affected the principals' perceptions of the easiness to adapt to the changes (η^2
31 = .19, $p = .02$) and their overall scorings of the voucher policy ($\eta^2 = .19, p = .02$). The
32 principals of kindergartens with smaller enrolment sizes were significantly less satisfied.
33 Medium effect of the pre-PEVS modes was found on principals' perception on the changes in
34 quality brought about by the PEVS and whether kindergartens should be subjected to
35 government's QA, with those of the kindergartens which converted from PIKs gave more
36 positive responses ($F \geq 4.29, \eta^2 \geq .08, ps < .05$). In fact, all of the principals of the converted
37 kindergartens considered the changes in quality as positive.

[Table 8 near here]

Discussion

This paper aims to empirically examine parents' and ECE service providers' reception of PEVS which was developed to enhance the quality of early childhood education in Hong Kong. We draw upon findings from a survey on the perceptions of the PEVS of parents, kindergarten principals, and teachers, who tended to agree that the PEVS had brought positive changes to the quality of their kindergartens but they also differed due to their different foci and experiences.

Parents' and ECE Providers' Different Views on the Implementation of the PEVS

The roles of the respondents appeared to be the most important determinant of the differences in perceptions. The parents in our survey were, in general, more supportive of the PEVS than both the principals and teachers. Nonetheless, while the government's goals were to enhance the quality and affordability of ECE as mentioned, the parents seemed to notice mainly the achievement of the latter goal. Despite the finding that they noticed the improvements in mainly the structural dimensions of quality such as teachers' qualifications, management practices, resources and facilities, and welcomed the QA requirement under the PEVS, they remained neutral about any improvement in the overall quality of their kindergartens. Their highly positive attitude towards the PEVS seemed to suggest that they interpreted and expected it to simply be a subsidy scheme, and their expectation was fulfilled

On the other hand, even though ECE providers were more positive about the PEVS' influence on the overall quality of their kindergartens, unlike parents, they saw the improvements came at a steep price, largely due to the resulting and sudden increase in their own workload and restrictions. Therefore, they generally experienced more difficulty in adapting to the changes and meeting the new requirements for QA and gave a significantly lower overall score to the policy. To the providers, the PEVS was not just a subsidy scheme,

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3 but truly a reform that affected every aspect of their preschools and their professional lives.
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5 This is a common phenomenon in market-based education reforms, wherein the work of
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7 principals and school administrators assume a more managerial character; while teachers
8
9 work as technicians to implement centrally determined curricula to achieve the standards set
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11 elsewhere and by other people (Taylor et al. 1997). Evans (1996) also notes that feelings such
12
13 as anxiety, ambivalence, and resistance are often experienced by educators during education
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15 reforms, especially if the educators perceive that the reforms as incompatible with the reality
16
17 of their teaching context, or they have not given the same amount of time as the policymakers
18
19 to integrate the proposed change into their philosophy. Even so, ECE service providers in
20
21 Hong Kong did try to cooperate with the government but were took away the security of
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23 receiving a salary that was commensurate with their enhanced qualifications and experiences.
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25 Their concerns were truly understandable.
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30 ***Constraints of Kindergartens as Contributors to the Differences***

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32 While significant differences in views between respondents of different roles,
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34 programs offered, and sizes of enrolment were found, it appeared that only the latter
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36 contributed to practical differences. Within-group comparisons revealed practical differences
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38 essentially among the principals in relation to the programs offered and the sizes of
39
40 enrolment. The results of the present survey offer a strong piece of empirical evidence to
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42 warrant at least part of the argument of the critics, who asserted that stakeholders of
43
44 kindergartens with a smaller student population might be jeopardized due to the per-student
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46 unit cost basis of subsidy calculation. Greater differences were shown among the views of the
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48 principals probably because they were the ones who were responsible for allocating
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50 resources, managing the work and professional development schedule of teachers, and
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52 handling the requests and requirements of the government. But other than the above, there
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3 was no conclusive evidence to show that the other constraints of kindergartens led to more
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5 negative perceptions of the respondents under the PEVS.
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7 ***Further Implications for the Hong Kong ECE Market***

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10 We mention in an earlier section that there were two conflicting notions of (process)
11
12 quality at play under the PEVS — the government-led, child-centered view of quality and the
13
14 market view of quality as academic preparation. In the present study, improvements in the
15
16 structural dimensions of quality were well-noticed by both the parents and ECE service
17
18 providers, but changes in the process quality were less prominent. As the survey was
19
20 conducted three years after the implementation of the PEVS, when the PIK transitional period
21
22 had just ended and right before the extinction of the professional development subsidy, it
23
24 might take additional time for the changes in structural quality to transform into process
25
26 quality. Evidence from later official reviews (e.g. Audit Commission 2013; QA reports of
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28 kindergartens, available online at the EDB's *Profile of Kindergartens and Kindergartens-*
29
30 *cum-Child care Centers* website) did suggest changes in process quality in terms of child-
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32 centered activities and pedagogy within the kindergarten settings, although they were not
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34 reported by the respondents of our survey.
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40 Yet, as our study revealed, these improvements, whether they were actually
41
42 recognized, did not appear to decisively affect the school choice of the parents. The true merit
43
44 of the PEVS, it seemed to the parents, was it allowed them to enroll their children in *more*
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46 tutorial and extra-curricular classes (and even regular kindergarten programs) to build up
47
48 their portfolios for primary school admission, reflecting the persistence of the existing market
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50 notion of quality even the PEVS had been implemented for a few years after Yuen's and
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52 Griesber's (2009) interview study. A survey conducted by Hong Kong Institute of Asia-
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54 Pacific Studies (2016) of the Chinese University of Hong Kong showed that one in three
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56 Hong Kong adults still believed children should be trained to 'win at the starting line' from
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3 early childhood. In this sense, not only might the PEVS continue to leave ECE service
4 providers caught between the government-led QA and the parental desire for academically-
5 loaded curricula, but it also raised questions about its impacts on the equity of ECE. As
6
7
8 Persell (2001) observed that families with more financial resources to begin with were likely
9
10 to ‘reinvest’ their savings in their children’s learning outside of their regular classrooms in
11
12 overseas market reforms of education, it made us wonder if family backgrounds could have
13
14 become a more important determinant of Hong Kong children’s opportunity in accessing the
15
16 ‘good’ primary schools, which may consequently improve their chance to get into ‘good’
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18 secondary schools and universities in the future.
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24 The latest development of the Hong Kong ECE market appears to render support to
25 our argument. As mentioned, the kindergarten enrolment rate was consistently over 100% in
26 the past 5 years (Committee on Free Kindergarten Education 2015; UNESCO Institute for
27
28 Statistics 2018). It was a known fact among many kindergartens that, with the extra subsidy,
29
30 some parents arranged their children to attend both morning and afternoon half-day programs
31
32 at two kindergartens concurrently hoping them to achieve excellent academic results and
33
34 obtain more certificates and awards in extra-curricular activities, thereby increasing their
35
36 chances of being admitted by their favorite primary schools (Information Services
37
38 Department 2014; Hong Kong Ideas Centre 2015; HKYWCA 2013; Ng 2013). More affluent
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40 parents even opted to send their children to both voucher-NPMKs and PIKs that adopted a
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42 non-local curriculum, attempting to maximize their chance of entering a ‘good’ local or
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44 international primary school. In fact, statistics showed that, despite a small drop in the total
45
46 number of kindergartens after the first few years of implementation of the PEVS (from 989
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48 in 2007 to 957 in 2012), the number of local NPMKs remained relatively consistent in the
49
50 past few years, from 861 in 2012 to 881 in 2017. The number of international PIKs, on the
51
52 other hand, increased rapidly, from 96 in 2012 to 149 in 2017, equivalent to an increase of
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60 55%

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3 (Audit Commission 2013; Education Bureau 2018a). This reveals an expansion of the market
4
5 of PIKs despite government interference. Moreover, going to ‘playgroups’ has become a
6
7 new trend for children as young as a few months old from middle-class families recently to
8
9 help develop their portfolios and prepare them for admission interviews of kindergartens
10
11 (Hong Kong Ideas Centre 2015; Karsten 2015; Ng 2013). These playgroups, however,
12
13 operate outside the boundaries of government policies.
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17 Therefore, although the ECE service providers worked diligently to promote the
18
19 HKSAR government’s notion of quality *within* kindergartens, we worry that the PEVS might
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21 have unintentionally exacerbated the existing market notion of quality, overloading children
22
23 with even more work outside of their regular kindergarten classrooms in order to ‘win at the
24
25 starting line’. ECE service providers might, therefore, need to shoulder the consequences
26
27 resulting from the two competing forces in the ECE market.
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29

30 31 ***Will the Free Quality Kindergarten Education Scheme Be a New Way Out?*** 32

33 Little in terms of the execution details of the PEVS seemed to have changed since our
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35 study, and this led to various side effects, including more and more NPMKs were
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37 approaching the tuition ceiling set by the government, declining participation in the PEVS
38
39 due to deficits, and high teacher turnover rate (Audit Commission 2013).
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42 The FQKES, which replaced the PEVS in September 2017, does address some of the
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44 criticisms of the PEVS. Half-day services provided by participating NPMKs are now fully
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46 subsidized by the government on a per-student basis. An additional subsidy is offered to
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48 kindergartens that provide whole-day services. Salary ranges for teaching staff are officially
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50 established (Education Bureau 2016a). Participating NPMKs cannot admit any child who has
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52 already enrolled in another scheme-NPMK, even if the parents are willing to pay full school
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54 fees (Education Bureau 2018b). These strategies may help address some of the concerns of
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56 ECE service providers and encourage them to concentrate on promoting the government-led
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3 notion of quality, which is now being strengthened through more rigorous financial control,
4 enhanced QA, and more frequent focus inspections (Education Bureau 2016a).
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8 Even so, since all kindergartens continue to operate outside the boundaries of formal
9 and public education and are subject to full-fledged market force, we doubt if the
10 government's notion of quality which is encapsulated in the title of the new *Kindergarten*
11 *Education Curriculum Guide — Joyful Learning through Play, Balanced Development All*
12 *the Way* (Curriculum Development Council 2017) — will ever turn out to be the dominant
13 discourse in the context of Hong Kong ECE. The PEVS has also shown that Hong Kong
14 parents would likely to reinvest their savings in the education of their children. As parents
15 would save even more under the free kindergarten policy, and considering changes in the
16 wider society and increased competition due to globalization, the existing market notion of
17 quality will probably endure under the FQKES. A comprehensive investigation, however,
18 will be needed to confirm our speculations.
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33 This study has limitations including the reliance on the adult report and not
34 considering other perspectives on quality. Yet it provides important data on stakeholders'
35 perceptions on the PEVS, which was a means of the Hong Kong government to begin its
36 reform in the long-neglected private ECE sector. The case of the PEVS illustrates the
37 opportunities and difficulties in reforming and financing the highly fragmented and
38 decentralized system of ECE in terms of balancing the perspectives of different stakeholders,
39 harnessing market forces, and promoting quality. It has revealed the struggles of the ECE
40 service providers in the process, but also uncovered the robustness of the existing market
41 forces, especially when they were deeply influenced by the culture. In reality, reform is a
42 complex, slow, and imperfect process. Structures can be changed overnight, but cultures
43 cannot. While the Hong Kong government seemed to be aware of the existing notion of
44 quality was not compatible with its own ideology and attempted to influence the market by
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3 monetary incentives and quality assurance activities, the consumers could pursue their
4 agenda, given the other levels of the education systems — primary, secondary, and tertiary —
5 remained unchanged. Thus, reforming ECE should mean more than just tackling the
6 problems in ECE. It requires careful consideration of the sociocultural context and the
7 influences of other levels of the education systems. This can be a useful lesson for many
8 jurisdictions that are considering or in the process of reforming their ECE systems to meet the
9 Sustainable Development Goal 4.2.

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19 The Hong Kong experience may seem to be particularly relevant for nearby
20 administrations (e.g., Mainland China and Taiwan) in where a similar saying ‘not losing at
21 the starting line’ is gaining prominence (Hsiao 2009; Jiang, Xu, and Tan 2017) and where the
22 development and expansion of ECE are of urgent need (State Council of the People's
23 Republic of China 2010), but it is equally useful for other countries that are trying to find new
24 ways to promote school readiness of young children in highly fragmented and decentralized
25 systems of ECE. As ECE in Hong Kong has long been privatized and continues to be
26 immensely reliant on private provision and parental choice even in an era of increasing public
27 funding, it provides a laboratory in which many of the arguments made in favor of
28 marketization or privatization of education can be tested. The existing evidence suggests that
29 the robust market forces imposed by parents do not necessarily promote the quality of
30 education desired by the government, making one rethink whether the neoliberal way is a
31 correct path to follow.
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Table 1. Demographic information of parents ($n = 413$)

Item	Parent (%)
Age	
20-30	13
31-40	71
41-50	14.6
51 or Above	1.3
Person completing questionnaire	
Mother	73.5
Father	24.1
Other guardian	2.4
Mother's highest educational attainment	
No formal education	0.3
Primary education	3.8
Secondary education	62.7
Tertiary education	33.2
Father's highest educational attainment	
Primary education	4.9
Secondary education	60.1
Tertiary education	35.0
Monthly median family income	
Below HK\$12,000	23.6
HK \$12,000- HK \$19,999	21.2
HK \$20,000- HK \$29,999	21.4
HK \$30,000- HK \$39,999	15.9
HK \$40,000 or above	17.8
Average monthly childcare expenditure	$M = \text{HK}\$3205.22$
	$SD = \text{HK}\$1959.77$

Table 2. Demographic information of principals ($n = 53$) and teachers ($n = 162$)

Item	Principal (%)	Teacher (%)
Age		
20-30	0	42.8
31-40	4.5	41.3
41-50	54.6	13.7
51 or above	40.9	2.2
Experience as principals/ teachers		
5 years or less	15.7	10.8
6-10 years	15.7	28.7
11-15 years	29.4	28.0
16-20 years	17.6	25.5
21 years or more	21.6	7.0
Years in present kindergarten		
5 years or less	17.6	53.8
6-10 years	21.6	23.7
11-15 years	21.6	12.5
16-20 years	17.6	9.4
21 years or more	21.6	0.6
Highest professional qualification attained		
Not yet obtained Certification of Education	0	32.7
Certification of Education	53.3	56.9
Bachelor of Education	24.4	9.8
Master of Education	20.0	0.7
Others	2.2	0

Table 3. Factor loadings and communalities based on a principal component analysis with promax rotation for the observations and concerns of parents ($n = 413$)

Questions	<i>M</i>	<i>SD</i>	Relief of financial burden	Quality of learning and teaching	Government resources	School accountability	Expectations on kindergartens	School choice
The PEVS helped relieve the financial burden on average-income parents.	3.99	.80	.93					
The PEVS helped relieve the financial burden on low-income parents.	3.99	.96	.91					
The PEVS helped relieve the financial burden on you.	4.01	.88	.88					
The PEVS made the curriculum and teaching better meet the needs of your child.	3.19	.72		.93				
The PEVS enhanced the learning and development of your child.	3.13	.78		.93				
The voucher value was sufficient.	2.59	.82			.84			
The resources provided by the government was sufficient.	2.64	.79			.81			
The caps on tuition set by the government were reasonable.	3.14	.75			.66			

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3	The PEVS enhanced the	3.24	.63	.93
4	accountability of your			
5	kindergarten.			
6				
7	The PEVS enhanced the	3.26	.63	.90
8	financial transparency of			
9	your kindergarten.			
10				
11	The philosophy,	3.95	.61	.92
12	objectives, and religious			
13	background of your			
14	child's kindergarten met			
15	your expectations.			
16				
17	The curriculum,	3.94	.60	.89
18	pedagogy, and teachers'			
19	qualification of your			
20	child's kindergarten met			
21	your expectations.			
22				
23	The PEVS influenced	3.32	.95	.89
24	your choice of			
25	kindergarten.			
26				
27	The PEVS reduced your	3.02	.90	.87
28	choices of kindergartens.			
29				

Note. Factor loadings < .4 are suppressed.

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Table 4. Factor loadings and communalities based on a principal component analysis with promax rotation for the observations and concerns of principals (n = 53)

Questions	<i>M</i>	<i>SD</i>	School operation and prospect	Workload and stress	Learning and teaching	Government restrictions	School accountability
The PEVS brought more resources, funds, and opportunities to your kindergarten.	2.94	1.03	.83				
The PEVS gave you more confidence in the operation of your kindergarten.	2.89	.87	.77				
The PEVS helped enhanced the competitiveness of your kindergarten.	2.87	.84	.65				
The PEVS brought you more professional development opportunities.	3.96	.71	.54	.42			
The PEVS helped relieve the financial burden on average-income parents.	3.83	.83	.46				
The PEVS helped relieve the financial burden on low-income parents.	3.09	1.18	.42				
The PEVS significantly increased your work-related stress.	4.00	1.00		.87			
The PEVS significantly increased your non-teaching workload (e.g. paperwork, statistical analyses, and administrative duties).	4.40	.79		.86			
The PEVS reduced your	3.38	1.00		.76			

flexibility in teaching and school administration.				
The PEVS affected the curriculum and pedagogy of your kindergarten.	2.81	1.00		.80
The PEVS prevented your kindergarten from maintaining its original philosophy, objectives, and religious background.	2.45	1.08		.68
The PEVS made the curriculum and teaching better meet the needs of your students.	2.98	.97		.50
The caps on tuition set by the government were reasonable.	2.58	1.08		.97
The voucher value was the same for both half-day and whole-day classes.	2.08	1.08		.71
The PEVS enhanced the financial transparency of your kindergarten.	3.60	.69		.88
The PEVS enhanced the accountability of your kindergarten.	3.75	.71	.48	.52

Note. Factor loadings < .4 are suppressed.

Table 5. Factor loadings and communalities based on a principal component analysis with promax rotation for the observations and concerns of teachers ($n = 162$)

Questions	<i>M</i>	<i>SD</i>	School operation and prospect	Professional development and qualifications	Workload and stress	Relief of financial burden on parents	Government restrictions	Learning and teaching
The PEVS gave you more confidence in the operation of your kindergarten.	3.14	.77	.80					
The PEVS made the operation of your kindergarten more cost-effective.	3.07	.68	.76					
The PEVS made your salary more reasonable.	2.44	.94	.64					
The PEVS enhanced the financial transparency of your kindergarten.	3.48	.66	.57					
The PEVS helped enhanced the competitiveness of your kindergarten.	3.14	.76	.52					
The PEVS brought you more professional development opportunities.	3.76	.70		.86				
The PEVS helped enhance teachers' qualification of your kindergarten.	3.69	.71		.78				
The PEVS made the curriculum and teaching	3.12	.79		.55				.53

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3	better meet the needs of				
4	your students.				
5	The PEVS made you	3.69	.88	.53	.50
6	pursue further				
7	professional				
8	development.				
9					
10	The PEVS significantly	4.01	.81		.83
11	increased your work-				
12	related stress.				
13	The PEVS significantly	3.98	.84		.80
14	increased your non-				
15	teaching workload (e.g.				
16	paperwork, statistical				
17	analyses, and				
18	administrative duties).				
19					
20	The PEVS reduced your	3.32	.66		.58
21	flexibility in teaching				
22	and school				
23	administration.				
24					
25	The PEVS helped relieve	3.66	1.03		.87
26	the financial burden on				
27	low-income parents.				
28	The PEVS helped relieve	3.78	.82		.82
29	the financial burden on				
30	average-income parents.				
31					
32	The voucher value was	2.79	.91		.73
33	sufficient.				
34	The PEVS reduced your	2.88	.79		.56
35	autonomy in curriculum				
36	design and teaching.				
37					
38	The voucher value was	2.78	.94		.55
39	the same for both half-				
40	day and whole-day				
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classes.			
The PEVS affected the	3.19	.87	
curriculum and			.85
pedagogy of your			
kindergarten.			

Note. Factor loadings < .4 are suppressed.

Table 6. Respondents' rankings of the impact of the PEVS on different areas of quality of their kindergartens ($N = 628$)

Area of Change	Dimension of Quality	Parent ($n = 413$)		Principal ($n = 53$)		Teacher ($n = 162$)	
		Overall Ranking	Mean Rank	Overall Ranking	Mean Rank	Overall Ranking	Mean Rank
Tuition Fees	Structural	1	2.77	1	3.47	2	3.76
Facilities and Resources	Structural	2	3.86	5	5.44	4	4.61
Management Practices	Structural	3	4.44	3	4.25	3	4.22
Teachers' Qualifications	Structural	4	5.27	2	3.56	1	3.72
Classroom Activities	Process	5	5.83	7	5.86	6	5.79
Teacher: Child Ratio	Structural	6	6.19	6	5.61	5	4.97
Teachers' Salaries	Structural	7	6.20	4	5.22	7	5.96
Child-centered Pedagogy	Process	8	6.24	8	6.39	8	6.59
Home-School Relationship	Process	9	8.44	9	8.25	9	8.33
Out-of-Class Activities	Process	9	8.44	11	9.89	10	9.21
Teacher-Child Relationship	Process	11	8.73	10	9.06	11	9.34
Others	NA	12	11.61	12	11.00	12	11.49
Kendall's W		.461***		.477***		.495***	

Note. * $p < .05$. ** $p < .01$. *** $p < .005$.

Table 7. Between-group comparisons of the general perception of quality under the Pre-primary Education Voucher Scheme (N = 628)

	Changes were perceived as positive		It was easy to adapt to the changes		The PEVS enhanced the overall quality of your kindergarten		Kindergartens should be subjected to QA		Scoring of the PEVS on a 100-point scale	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<i>Between different roles</i>										
Parent (<i>n</i> = 413)	3.63	.62	3.60 [#]	.59	3.31 [#]	.70	4.15 [#]	.68	74.48 [#]	12.52
Principal (<i>n</i> = 53)	3.57	.85	3.19	.89	3.57	.82	3.70 [#]	.80	56.63	19.96
Teacher (<i>n</i> = 162)	3.53	.61	3.32	.71	3.65	.69	3.39 [#]	.85	59.55	15.51
<i>F</i>	1.71		16.71***		14.03***		63.98***		78.69***	
η^2	.01		.05		.04		.17		.22	
<i>Between different programs offered</i>										
Half-day (<i>n</i> = 213)	3.67	.63	3.65 [#]	.68	3.48	.71	4.01	.78	71.01	12.53
Whole-day (<i>n</i> = 84)	3.43 [#]	.75	3.41	.66	3.34	.83	3.76	.93	63.12 [#]	17.80
Mixed (<i>n</i> = 331)	3.60	.61	3.41	.65	3.40	.70	3.89	.80	69.55	17.06
<i>F</i>	4.15*		8.94***		1.24		3.17*		7.01***	
η^2	.01		.03		.00		.01		.02	
<i>Between different pre-PEVS modes</i>										
NPMK (<i>n</i> = 511)	3.61	.66	3.51	.68	3.45	.73	3.92	.80	68.87	15.46
PIK (<i>n</i> = 117)	3.54	.58	3.43	.63	3.30	.68	3.87	.85	70.56	17.88
<i>F</i>	1.21		1.11		3.96*		.26		.95	
η^2	.00		.00		.01		.00		.00	

Between different sizes of enrolment

Below 100 ($n = 68$)	3.42 [#]	.71	3.03 [^]	.76	3.49	.80	3.59 [#]	.80	57.21 [#]
100 – 199 ($n = 84$)	3.45 [#]	.72	3.25 [^]	.62	3.48	.74	3.40 [#]	.89	61.06 [#]
200 – 299 ($n = 75$)	3.66 [#]	.53	3.46 [^]	.62	3.53	.69	3.91 [#]	.78	71.88 [#]
300 or above ($n = 401$)	3.65 [#]	.61	3.63 [^]	.62	3.38	.71	4.07 [#]	.74	72.28 [#]
<i>F</i>	4.52***		21.76***		1.42		21.80***		25.94***
η^2	.02		.10		.01		.10		.12

Note. * $p < .05$. ** $p < .01$. *** $p < .005$.

Significantly different from the other two groups of respondents as indicated by Fisher's LSD.

^ Significantly different from the other three groups of respondents as indicated by Fisher's LSD.

Table 8. Within-group comparisons of the general perception of quality under the Pre-primary Education Voucher Scheme ($N = 628$)

	Changes were perceived as positive		It was easy to adapt to the changes		The PEVS enhanced the overall quality of your kindergarten		Kindergartens should be subjected to QA		Scoring of the PEVS on a 100-point scale	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<i>Within parents</i>										
Half-day ($n = 157$)	3.68	.63	3.71	.63	3.35	.68	4.20	.69	73.18	11.06
Whole-day ($n = 39$)	3.71	.57	3.71	.46	3.34	.75	4.32	.57	74.86	12.45
Mixed ($n = 217$)	3.59	.62	3.50 [#]	.57	3.28	.71	4.09	.69	75.36	13.48
<i>F</i>	1.25		6.47**		.49		2.44		1.27	
η^2	.01		.03		.00		.01		.01	
NPMK ($n = 327$)	3.66	.63	3.64	.60	3.34	.72	4.17	.69	74.13	12.83
PIK ($n = 86$)	3.51	.57	3.45	.55	3.20	.62	4.07	.67	75.86	11.24
<i>F</i>	3.96*		6.79*		2.41		1.28		1.15	
η^2	.01		.02		.01		.00		.00	
Below 100 ($n = 0$)	--	--	--	--	--	--	--	--	--	--
100 – 199 ($n = 23$)	3.36 [@]	.66	3.23	.43	3.18	.73	3.90	.70	73.42	11.31
200 – 299 ($n = 47$)	3.61	.58	3.41	.54	3.41	.72	4.07	.71	78.74 [@]	14.13
300 or above ($n = 343$)	3.65 [@]	.62	3.65 [#]	.60	3.31	.70	4.18	.68	73.96 [@]	12.28
<i>F</i>	2.32		8.28***		.87		2.00		2.86	
η^2	.01		.04		.00		.01		.02	
<i>Within principals</i>										

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2											
3	Half-day ($n = 14$)	3.64	.75	3.07	1.00	3.79@	.89	3.79	.70	65.36	16.11
4											
5	Whole-day ($n = 11$)	2.91#	1.04	3.18	.87	3.09@	.94	3.45	.93	43.00#	19.32
6											
7	Mixed ($n = 28$)	3.81	.69	3.26	.86	3.64	.68	3.75	.80	57.20	19.85
8	F	5.05*		.20		2.62		.65		4.17*	
9	η^2	.17		.01		.10		.03		.15	
10											
11	NPMK ($n = 45$)	3.47	.88	3.14	.88	3.60	.75	3.60	.81	57.56	17.96
12											
13	PIK ($n = 8$)	4.13	.35	3.50	.93	3.38	1.19	4.25	.46	51.88	29.27
14											
15	F	4.29*		1.14		.51		4.83*		.54	
16	η^2	.08		.02		.01		.09		.01	
17											
18	Below 100 ($n = 18$)	3.44	.96	2.76@	.97	3.39	.98	3.67	.97	47.50@	22.88
19											
20	100 – 199 ($n = 14$)	3.36	1.01	3.07@	.73	3.43	.65	3.43	.94	52.70@	20.27
21											
22	200 – 299 ($n = 7$)	3.71	.49	3.43	.79	3.71	.95	4.00	.58	63.57	14.06
23											
24	300 or above ($n = 14$)	3.86	.66	3.71#	.73	3.86	.66	3.86	.36	68.08#	11.46
25	F	1.01		3.70*		1.08		1.06		3.45*	
26	η^2	.06		.19		.06		.06		.19	
27											
28	<i>Within teachers</i>										
29											
30	Half-day ($n = 42$)	3.63	.58	3.62#	.66	3.85@	.62	3.40	.77	64.95#	13.90
31											
32	Whole-day ($n = 34$)	3.27#	.72	3.15	.66	3.41@	.89	3.24	.92	56.35	12.72
33											
34	Mixed ($n = 86$)	3.57	.56	3.24	.72	3.64	.61	3.44	.85	58.08	16.83
35	F	3.79*		5.51**		3.93*		.69		3.39*	
36	η^2	.05		.07		.05		.01		.05	
37											
38	NPMK ($n = 139$)	3.54	.62	3.32	.70	3.65	.71	3.44	.80	59.91	14.30
39											
40	PIK ($n = 23$)	3.43	.59	3.35	.78	3.61	.58	3.04	1.02	57.26	22.16
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<i>F</i>	.58		.04		.08		4.49*		.48	
η^2	.00		.00		.00		.03		.00	
Below 100 (<i>n</i> = 50)	3.41@	.61	3.12#	.66	3.52	.74	3.56	.73	60.67	14.27
100 – 199 (<i>n</i> = 47)	3.51	.66	3.32	.66	3.64	.74	3.15	.87	57.82	16.50
200 – 299 (<i>n</i> = 21)	3.75@	.44	3.57@	.75	3.71	.46	3.52	.87	58.72	17.51
300 or above (<i>n</i> = 44)	3.57	.63	3.43@	.76	3.77	.68	3.36	.89	60.38	15.36
<i>F</i>	1.59		2.64		1.06		2.12		.29	
η^2	.03		.05		.02		.04		.01	

Note. * *p* < .05. ** *p* < .01. *** *p* < .005.

- @ Significantly different from one of the other groups of respondents as indicated by Fisher’s LSD.
- # Significantly different from the other two groups of respondents as indicated by Fisher’s LSD.
- ^ Significantly different from the other three groups of respondents as indicated by Fisher’s LSD.