**Exploring Parental Satisfaction with Hospital-Affiliated Kindergartens in Taiwan**

**Abstract**

*This study analyzed parents’ satisfaction towards the facilities, child care service, and environment of hospital- affiliated Preschools in Taiwan. Suggestions were provided for hospital-affiliated Preschools to improve the service satisfaction.*

*The research questionnaires for this study were distributed from September to November 2023, as the questionnaire survey method was adopted to study the service satisfaction of eight hospital-affiliated Preschools in Taiwan. A total of 1183 questionnaires were sent out, and 736 valid questionnaires were retrieved. The questionnaire was reviewed and revised by three experts. The overall Cronbach's Alpha was 0.968, and the data were statistically analyzed by SPSS.*

*The results of the study revealed the following.*

*There were no significant differences in all dimensions in terms of the demographic variables of age and occupation, while there were significant differences in the educational level for all dimensions.*

*In terms of hospital location, it was found that the hospitals in the northern part of Taiwan were better than those in the southern part of Taiwan.*

*The correlations between all the dimensions were found to be highly significant and positive in the analysis. The education and care dimension had the highest impact on the child care services.*

*Parents attached the highest importance to the education and care dimension of child care services, so Preschools should do their best in terms of teacher qualifications, teaching methods, teaching materials and teaching aids in order to gain parents' trust. In addition, all dimensions were interlocked, so as long as one of the dimensions can be effectively improved, the other dimensions would also improve. It is suggested that all dimensions should be paid attention to and developed, so that not only the parents can see them, but also the children can grow up safely and happily, and service satisfaction could be greatly improved.*

**Keywords**

Hospital-affiliated preschools, Parental Satisfaction with childcare services, Administration, Education and care, Sanitation and equipment safety.

**1. Introduction**

Taiwan's birth rate is among the lowest in the world, thus it has entered the era of sub-replacement fertility. Many couples are reluctant to have children because of work pressure and child care environment. This is especially true for busy healthcare workers in hospitals. Therefore, some hospitals have set up Preschools to help their employees solve their problems and provide a good environment to raise the children of the employees. The environment suitable for early childhood education is created through the establishment of affiliated Preschools, as parents also want their children enjoy good learning and growth. This is appealing to the hospital staff, and would increase their loyalty to the hospital and reduce the turnover rate, thus achieving the purpose for increasing the attraction and retention of talents for the hospital. This study examined the satisfaction of parents with child care services in hospital-affiliated Preschools in Taiwan, and provided directions for Preschools to focus on and improve in the future.

**2. Literature review**

**2.1 Definition of dimensions**

The administration dimension means that the school's mission and goals must be defined and articulated, and they should be achieved by implementing programs, delegating tasks and allocating resources [1-3].

The education and care dimension refers to the content related to teaching methods and types of teaching (e.g., planning of teaching activities, design of teaching materials and aids, development of learning files for young children, etc.) [4-6].

The sanitation and safety dimension refers to various safety requirements and emergency equipment, nutrition, and disease control [7-9].

Satisfaction with child care services refers to the degree of satisfaction of parents with the services provided by Preschools.

**2.2 Interaction between dimensions of administration, education and care, sanitation and equipment safety**

The two main pillars of any educational institution are educational administration and educational care. It is important that they work closely together[10].

Teachers’ education, care, sanitation, and equipment safety interact with each other. Those with higher levels of education and quality of education live longer and healthier lives than those with lower levels of education and quality of education, and are more conscious of environmental sanitation [11-12].

About two thirds of the studied schools have high levels of administration and sanitation, and the results of the study showed a positive relationship between administration and sanitation[13].

**2.3 Effects of dimensions of administration, education and care, sanitation and equipment safety on satisfaction with child care services**

Between families and Preschools care centers is a major factor influencing fathers' and mothers' satisfaction with child care, and the number of contacts between Preschools and parents is significantly positively related to parents' satisfaction with child care. That is to say, the more frequent the contact between Preschools and parents, the higher the parents' satisfaction with their child care services[14-15].

Female parents are more concerned about the sanitation and equipment safety in the kindergarten than their male counterparts. Parents who are willing to pay a high fee for child care services are more satisfied with the sanitation and equipment safety as well as the infant/toddler program[16-17].

About 94% of parents of young children are satisfied with the sanitation services in the educational institutions, 88% are satisfied with the scheduling, and 79% would recommend their child's institution. Parents of children with poor sanitary facilities in Preschools are also less satisfied with the amount of time they spend with their children[18].

**3. Research materials and methods**



**Figure 1**. *strature*

**3.1 Materials:**

A survey was conducted to determine the satisfaction of parents with the child care services of 8 hospital-affiliated Preschools in Taiwan.

**3.2 Methods**

A questionnaire survey method was adopted; the validity of the questionnaire was corrected by three experts; 1,183 questionnaires were distributed from September to November 2023 and 858 questionnaires were received, of which, 736 questionnaires were valid. The overall reliability of the questionnaire was 0.968. The data of the questionnaires were statistically analyzed by SPSS.

**4. Results**

**4.1 Sample statistics**

Demographic variables: Most of the respondents was aged 30-39 years old (65.4%), with a university degree (67.7%), had two children (59.6%) and were from a two-parent family (85.2%). A lot of them were nurses (44.9%).

Type of hospitals: The nature of their hospitals were mostly public (75.3%) and medical centers (75.1%), located in northern Taiwan (45.4%).

**4.2 Descriptive statistics**

**4.2.1 Demographic variables**

There were no significant differences in age and occupational category for all dimensions; the number of children was significantly different only in the administration dimension (p), and the post-hoc comparison showed that the score of those who had two children was higher than that of those who had one child; while in the education dimension, there were significant differences in all dimensions (Table 1), and the post-hoc comparison showed that in the administration dimension, the satisfaction with child care services of those who had a university degree and those who graduated from a graduate school were higher than those who had a high school degree, and the satisfaction of those graduating from graduate schools with the dimensions of education and care as well as sanitation and equipment safety were higher than those with high school education.

**Table 1.** *Analysis of educational level by dimension*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Dimensions** | **Variables** | **No.** | **Mean** | **SD** | **F** | **P** | **Post-test** |
| Administration | (1) High school | 22 | 4.36 | 0.53 | 5.037 | 0.007\*\* | (2)、(3)>(1) |
|  | (2) University | 498 | 4.63 | 0.43 |  |  |  |
|  | (3) Graduate School | 216 | 4.66 | 0.41 |  |  |  |
| Education | (1) High school | 22 | 4.34 | 0.50 | 4.833 | 0.008\*\* | (3)>(1) |
| and care | (2) University | 498 | 4.56 | 0.46 |  |  |  |
|  | (3) Graduate School | 216 | 4.63 | 0.42 |  |  |  |
| Sanitation and | (1) High school | 22 | 4.37 | 0.49 | 4.277 | 0.014\* | (3)>(1) |
| equipment safety | (2) University | 498 | 4.58 | 0.47 |  |  |  |
|  | (3) Graduate School | 216 | 4.65 | 0.47 |  |  |  |
| Satisfaction | (1) High school | 22 | 4.35 | 0.47 | 5.341 | 0.005\*\* | (2)、(3)>(1) |
| with child | (2) University | 498 | 4.65 | 0.43 |  |  |  |
| care services | (3) Graduate School | 216 | 4.67 | 0.43 |  |  |  |

\*P<0.05 \*\*P<0.01 \*\*\*P<0.001

**4.2.2 Hospital location**

In terms of hospital location, there were significant differences across all dimensions, with post hoc comparisons revealing that the northern part of Taiwan was better than the southern part (as shown in Table 2).

**Table 2.** *Analysis of hospital area by dimensions*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Dimensions** | **Location** | **No.** | **Mean** | **SD** | **F** | **P** | **Post-test** |
| Administration | (1) northern | 334 | 4.707 | 0.389 | 9.496 | 0.000\*\*\* | (1)>(3) |
|  | (2) Central | 168 | 4.632 | 0.421 |  |  |  |
|  | (3) southern | 234 | 4.548 | 0.480 |  |  |  |
| Education and | (1) northern | 334 | 4.629 | 0.427 | 3.596 | 0.028\* | (1)>(3) |
| care | (2) Central | 168 | 4.547 | 0.472 |  |  |  |
|  | (3) southern | 234 | 4.534 | 0.475 |  |  |  |
| Sanitation | (1) northern | 334 | 4.658 | 0.444 | 5.098 | 0.006\*\* | (1)>(3) |
| equipment | (2) Central | 168 | 4.582 | 0.481 |  |  |  |
| safety | (3) southern | 234 | 4.531 | 0.510 |  |  |  |
| Satisfaction | (1) northern | 334 | 4.698 | 0.393 | 4.362 | 0.013\* | (1)>(3) |
| with child | (2) Central | 168 | 4.641 | 0.447 |  |  |  |
| care services | (3) southern | 234 | 4.590 | 0.472 |  |  |  |

\*P<0.05 \*\*P<0.01 \*\*\*P<0.001

**4.2.3 Correlation analysis for all dimensions**

For the correlation analysis of all the dimensions, we used Pearson correlation analysis, and the results are shown in Table 3.

All the dimensions showed highly significant positive correlations, which meant that all the dimensions of the Preschools had a positive influence on each other.

**Table 3.** *Correlation analysis for all dimensions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Administration** | **Education and care** | **Sanitation and equipment safety** | **Satisfaction with child care services** |
| Administration | 1 | 0.791\*\* | 0.757\*\* | 0.819\*\* |
| Education and care |  | 1 | 0.834\*\* | 0.846\*\* |
| Sanitation and equipment safety |  |  | 1 | 0.793\*\* |
| Satisfaction with child care services |  |  |  | 1 |
| \*P<0.05 \*\*P<0.01 \*\*\*P<0.001 | | | | |

**4.2.4 Multiple regression analysis**

In the multiple regression analysis, we wanted to know how each dimension affected the satisfaction with child care services, and we found that the coefficients of all dimensions were positive, among which the coefficient of education and care was the highest (which meant that the education and care dimension had a higher impact on the satisfaction with child care services), and the three dimensions were found to have a significant effect after the test. The adjusted R2=0.783, so administration, education and care, sanitation and equipment safety had 78.3% explanatory power for satisfaction with child care services. (Table 4)

**Table 4.** *Multiple regression analysis of various dimensions on satisfaction with child care services*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variables** | **B** | **SD** | **T** | **P** |
| Constant | 0.430 | 0.083 | 5.183 | 0.000\*\*\* |
| Administration | 0.356 | 0.029 | 12.088 | 0.000\*\*\* |
| Education and care | 0.401 | 0.033 | 12.113 | 0.000\*\*\* |
| Sanitation and equipment safety | 0.159 | 0.030 | 5.358 | 0.000\*\*\* |
| F |  | 885.830 |  |  |
| R2 |  | 0.784 |  |  |
| Adj-R2 |  | 0.783 |  |  |
| \*P<0.05 \*\*P<0.01 \*\*\*P<0.001 | | | | |

**5. Conclusion and suggestions**

**5.1 Demographic variables**

In this study, the majority of the respondents were 30-39 years old with the university education and had two children. Most of them were from two-parent families. Most were nurses and had a monthly income of less than NTD 50,000. There was a significant difference in all dimensions in terms of the educational level, and those with a higher educational level had a higher evaluation of child care services than those with a lower educational level, perhaps because people of a higher education level have further knowledge of Preschools and are able to understand the content of child care services.

　　　In terms of the location of hospitals, it was found the satisfaction with almost all dimensions was higher for the hospitals in the northern part of Taiwan than those in the southern part, because the capital of Taiwan, Taipei, is located in the northern part of Taiwan and the development of the northern part is better than that of the southern part. Therefore, child care services in the northern part of Taiwan are more complete than those in the southern part, which leads to a higher level of satisfaction in the northern part of Taiwan than in the southern part.

**5.2 Correlation analysis of all dimensions**

The correlation between all the dimensions was highly significant and positive; the better the kindergarten administration was, the more the quality of the other dimensions was improved. Education and care are more important to the parents using the child care services, so improving the education and care dimension could enhance the satisfaction with child care services. All parents want to see their children grow up in a safe and clean environment. If all the requirements for the child care environment are met, the satisfaction with child care services would also increase. The dimensions of child care services are interrelated, and once one dimension becomes better, the other dimensions would also become better.

**5.3 Regression Analysis**

All dimensions had a positive and significant effect on the satisfaction with child care services; among them, the weight of education and care was higher. Parents attached the highest importance to the child care institutions’ having professional and friendly teachers who can teach their children well and help them grow up, followed by administration, and then sanitation and equipment safety; this also provides the order of priority of the services of Preschools.

**5.4 Suggestions**

* If kindergarten administrative measures can be significantly improved, such as holding more parent-child seminars, increasing parent-child communication time with parents and children, other dimensions can also be positively affected, and satisfaction would rise.
* Education and care is the most important part of a child's growth process, affecting the child's learning foundation and personality. It is thus recommended that emphasis be placed on teacher training, including how to design interactive programs that children are interested in, and more care and interaction with children.
* The environment in Preschools should emphasize sanitation and safety. If the safety of children can be greatly improved, parents would feel relieved to entrust their children to Preschools for care.
* Parents attach great importance to education and care activities, so the kindergarten teachers, teaching materials and teaching methods should be made more satisfactory to parents.
* All the dimensions are interdependent, as long as one of them can be effectively improved, the other dimensions would improve as well. We suggest that all dimensions should be paid attention to and developed, so that not only the parents can see them, but also the children can also grow up safely and happily, and satisfaction with the child care services would be greatly improved too.