

Family Recreation through Family Portfolio: Family Sugoroku

Tomomi SATO
tomomi@e-sato.net
Lecturer
Aichi Shukutoku University
Aichi, Japan

Satoru KONNO
konno@switch-etm.com
Company
Switch Entertainment Inc.
Tokyo, Japan

Junko ARAKI,
arakijunko17@gmail.com
Associate Professor
SANNO University
Kanagawa, Japan

Shinichi SATO
satoshin@n-fukushi.ac.jp
Professor
Nihon Fukushi University
Aichi, Japan

The authors have developed a family portfolio system (FP) that aims to promote parental awareness and interpersonal interaction themes. Users can store pictures with a type tag and an emotion tag. In this study, the authors develop a "Family Sugoroku" application linked with FP. "Sugoroku" is a traditional Japanese board game in which players roll the dice in turn and move their piece on the map designed on the board. In Family Sugoroku, the data stored in FP are used as elements of the map. The pictures from FP are randomly shown on the map, and players move their pieces on the map according to the instructions automatically generated from the type and the emotion tags of the picture. The authors aim at supporting conversation in the family and promoting reflection of family histories through the use of the Family Sugoroku. Family Sugoroku is a proposal of a new recreational activity through family recollections.

Key words: Portfolio, Application, Parental Development, Family Communication

INTRODUCTION

The authors aim at supporting parent development by using family portfolios (Figure 1). Parent development includes not only parental skills in rearing children, but also parents' own development as people and social beings. Parent development changes as children grow, and parents restructure their roles in accordance to social changes (Kashiwagi, 1994). In order for parents to develop, they must interact with their children, have dialogues with their family, and reflect on their roles as parents (Thomas, 1996). Reflective dialogues are expected to change parents' consciousness and their interaction with their children. Furthermore, these dialogues help parents recognize the pleasure of child-rearing, and help strengthen their feelings of self-esteem. Thus, it is necessary to develop a sustainable system to support such parent development.

Many people take numerous pictures and movies of their children. Increasingly more people are sharing these records with both their family and friends on social media (such as photo sharing websites and/or social networking services (SNS)). Some people even post their feelings and thoughts to weblogs or SNS on a daily basis. Smart phones and cellular phones accelerate this trend because people can post more easily and frequently by using such devices. These activities may help parents reflect on their behaviors as parents. The authors believed that parent development could be encouraged if they could

construct a portfolio by collecting data stored in various forms in various places. The authors have developed a family portfolio system (FP) that aims at promoting “parental awareness (PA)” and “interpersonal interaction themes (IIT).” In FP, users can store pictures with a type tag and an emotion tag.

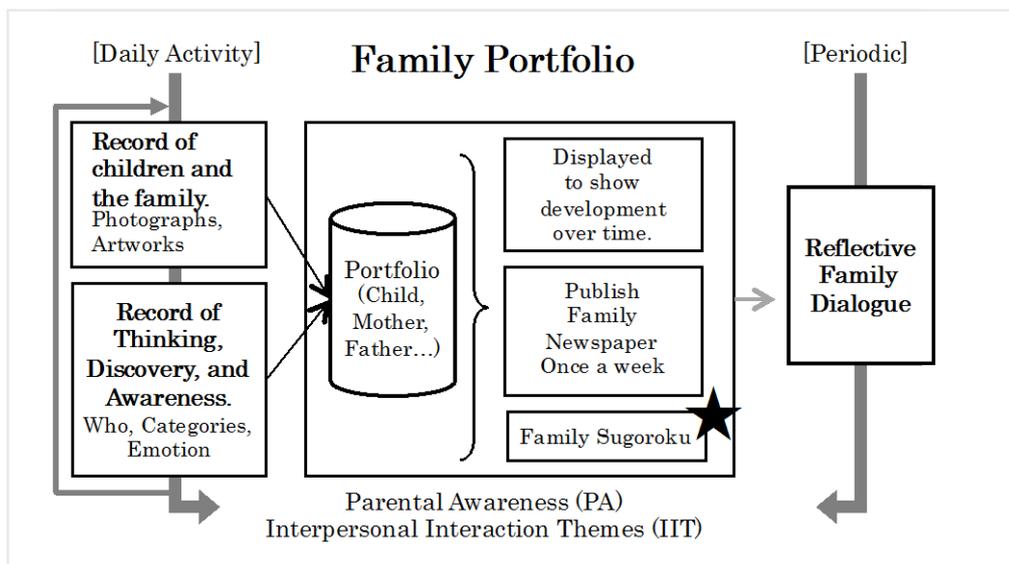


Figure 1: The Image of Family Portfolio

Purpose of this study

As a part of this portfolio, the authors developed functions for the application named “Family Sugoroku.” “Sugoroku” is a traditional Japanese board game in which players roll the dice in turn and move their piece on the map designed on the board. In Family Sugoroku, the data stored in FP are used as elements of the roulette (see Figure 2). The pictures from FP are randomly shown on the roulette, and players move their piece on the board according to the instructions automatically generated from the type and the emotion tags of the picture. The authors aim at supporting conversation in a family and promoting reflection on family histories with the use of Family Sugoroku. Family Sugoroku is a proposal of a new recreational activity through family recollections.

The Functions of Family Sugoroku

1) The Roulette of FP Sugoroku

The components of the roulette are the pictures stored in FP. When a user clicks the button, the pictures are randomly shown in turn on the screen, and then one picture is selected when the user pushes the stop button. Instructions on how to move (go forward, go back, or stop) on the Sugoroku board are shown according to the category and emotion tag of the selected picture.

Following are some rules according to the category and emotion tag:

- Good, pleased, enjoyable → Move forward

- Regret, try harder next time → Pause
- Lonely, sad → Move backward
- Sad, angry, fear, surprised → Move back to the starting point
- Others (users' original tags) → Move backward

1) Start-up window	2) Roulette window	3) Result window	4) Zoom window
			
<p>Top window of Family Portfolio. Family Sugoroku button opens Roulette window</p>	<p>Roulette window of Family Portfolio. Start button starts roulette. Result window opens when Stop button is pushed.</p>	<p>After stop button is pushed, the result window appears. Family plays a game of Sugoroku.</p>	<p>If + button is pushed on Roulette window, Zoom of picture appears.</p>

Figure 2: The Roulette Image of Family Portfolio

2) The board of FP Sugoroku

The preliminary Sugoroku board is arranged as shown in Figure 3. Each square contains an instruction designed to encourage communication among family members. The users must obey the instruction shown on the square where they land.

Below are examples of instructions:

- 1) Tell what the user appreciates about other family members.
- 2) Tell what the user contributes to the family.
- 3) Offer some words of encouragement to one family member.
- 4) Tell one family member about a behavior that the user wishes he/she would reconsider.
- 5) Tell one or more family members what the user worked hard to achieve this week.
- 6) Tell one or more family members something the user regretted this week.
- 7) Tell one or more family members what the user felt pleased about this week.
- 8) Tell one or more family members what the user felt sad about this week.
- 9) Tell one or more family members the user's goal for next week.
- 10) Hug all family members, one at a time.
- 11) Be tickled by all other family members.



Figure 3: The Family Sugoroku Board

Conclusion and Future Plan

In this study, the authors developed a smartphone application called “Family Sugoroku” as an element of family portfolio. This application is supposed to be used not only by children but also their parents. The function to record multiple pictures of the work was implemented, considering that it is important to record both children’s pictures and their artwork. The function to view works according to the timeline and the function to confirm the process of creating works were also implemented. These functions would prompt users to realize their development as a family, and would improve PA and IIT.

The authors plan to conduct a long-term study with families who use this application, and confirm if the application brings about positive effects to their PA and IIT. Parenthood development will also be confirmed through the study.

Acknowledgements

This work was supported by a Grant-in-Aid for MAEKAWA ZAIDAN.

REFERENCES

- Kashiwagi, K. (1994) "Becoming a Parent" and Personality Development: A Lifespan Developmental View. *The Japanese Journal of Developmental Psychology*, Vol.5, No.1, pp. 72-83. (In Japanese).
- Thomas, R. (1996) Reflective dialogue parent education design: Focus on parent development. *Family Relations*, Vol. 45, No.2, pp. 189-200.
- Sato, T., Tsubakimoto, M., Asakura, T. (2014). Designing and Evaluating the Activity which Supports Family Narratives: "Workshop of Making Video Letter for the Future Child." *The Japan Journal of Educational Technology*, 37(3) now printing. (In Japanese).
- Sato, T., Konno, S., Araki, J. & Sato, S. (2016) Analyzing the Smartphone Application “Children’s Own Museum” as an Element of a Family Portfolio. *Child Science*. VOL.12, pp. 39-43.