ESCAPING WITH THE FAMILY

Cooperation and Collaboration in a Single-use Boardgame

MELISSA J. ROGERSON, CLAUDIA R. R. MCHARG, & ELEANOR I. R. MCHARG

ABSTRACT

This paper describes the intergenerational play of an Escape Room-style boardgame in a family setting. Through analysis of five key moments during play, it shows that this style of game is congruent with the 'core' model of family leisure, and highlights the importance of naïve operation to avoid privileging particular social and cultural knowledge as a prerequisite for successful completion of a game. This is important for the design of games that can be played by intergenerational groups, as it focuses attention on the play of the game rather than on prior, frequently age-dependent knowledge.

INTRODUCTION

Participation in family leisure activities is linked to improved quality of life (Hodge et al., 2017), however leisure is experienced differently by different members of a family (Hebblethwaite, 2015; Shaw, 1992). In particular, women (Holman & Epperson, 1984), girls (Zabriskie & McCormick, 2003) and adolescents in general (Larson, Gillman, & Richards, 1997, p. 81) report lower satisfaction with family leisure activities. This paper examines intergenerational play of a boardgame as a specific form of

family leisure, connecting research on intergenerational play and family leisure through a set of autoethnographic observations.

To date, much of the literature on intergenerational play has focused on digital games (Chua, Jung, Lwin, & Theng, 2013; Costa & Veloso, 2016; Wearing, Wearing, McDonald, & Wearing, 2015), on object-based free play (Roggman, Boyce, Cook, Christiansen, & Jones, 2007), on sports and outdoor recreation (Goodenough, Waite, & Bartlett, 2015; Haycock & Smith, 2014; Karsten, Kamphuis, & Remeijnse, 2015; Quarmby & Dagkas, 2010), and/or on play(ful) activities developed as a research tool to provide insight into a setting or interaction. For example, Vetere, Davis, Gibbs, Francis, and Howard (2006) developed a technology probe to explore object play as a means to maintain healthy grandparent-grandchild relationships over distance. Moreover, most literature on intergenerational play and family leisure[1] is concerned with the play of younger, preteen children and their parents or grandparents (Goodenough et al., 2015; Hebblethwaite, 2015; Karsten et al., 2015), and with the potential for play to foster intergenerational interactions (Costa & Veloso, 2016, p. 55; Vetere et al., 2006). This paper, by contrast, examines the dynamics of play in a family with teenaged and young adult children. It contributes, therefore, to understanding boardgame play, collaborative puzzle-solving, and intergenerational play and leisure practices in families with older children.

In a previous work (Rogerson & Gibbs, 2018), we examined the ways in which hobbyist boardgamers seek to continue to engage with boardgames even after the arrival of a child. We showed that, rather than indoctrinating a child into the boardgaming hobby, playing boardgames as a family fulfils a phatic role, reinforcing the close emotional connection between family members (Rogerson & Gibbs, 2018, pp. 288-290). Playing a game thus contributes to family cohesion (Harrington, 2015, p. 472;

1. We see intergenerational play as a form of family leisure. Thus, references to family leisure should be understood to include intergenerational play, unless otherwise noted.

Zabriskie & McCormick, 2001), and to "showing our kids that they are loved and important" (Mactavish & Schleien, 1998).

In this paper, we describe an intergenerational problem-solving or puzzle experience, in the form of an "Exit" or "Escape Room-style" game[2]. These collaborative games have been shown to be effective in building communication and teamwork skills (Williams, 2018). We consider how different family members bring different skills, knowledge, ability and approaches to solving the game. Moreover, we examine how different generations within one family negotiate the different roles in a collaborative puzzle experience. In particular, we are interested in the game as a mediator of face-to-face communication in a family with older teenager daughters for whom recreational time spent with parents may be more chore than social highlight (J. R. Agate, Zabriskie, Agate, & Poff, 2009; Shaw, 1992; Zabriskie & McCormick, 2003). Rather than focusing on boardgame play as a learning mode or a therapeutic tool to elicit particular emotions, this paper positions boardgame play as a normal leisure activity which families can share. Our motivation here is not to answer what boardgames can do for a family, but rather to explore and understand the lived experience of intergenerational boardgame play within a family.

REVIEW OF RELATED WORK

Many authors have documented the positive benefits of family leisure and its links to higher quality of life (Hodge et al., 2017). Parents may see family leisure experiences as part of their responsibility towards their children and point to instrumental benefits of leisure, such as learning skills and acquiring knowledge, enhancing children's development (Goodenough et al., 2015, p. 378), building family connectedness (J. R. Agate et al., 2009, p. 207; Hallman & Benbow, 2007; Shaw, 2008, pp. 695-696)

2. We have tried to select examples and frame our discussion in such a way as to avoid 'spoilers', should the reader wish to play The Abandoned Cabin. For this reason, identifiers on cards have, where practicable, been redacted.

and reinforcing shared values (Hebblethwaite, 2015, p. 361). These latter two benefits are at times presented as an overt reason for leisure, even above inherent interest in and enjoyment of the activity (Loveday, Lovell, & Jones, 2018, p. 7). Providing opportunities for happiness and success through family leisure may thus be related to a positive sense of being a "good parent" (Goodenough et al., 2015, pp. 384-385; Schwab & Dustin, 2015, p. 181). Accordingly, family leisure is frequently a conscious and deliberate activity, "planned, organized and 'constructed' so that it has a particular value or quality." (Shaw, 2008, p. 694). One study, which focused on families with a child with a developmental disability, found that shared intergenerational leisure activities were "especially helpful in developing social skills such as learning to problem solve, to compromise, and to negotiate." (Mactavish & Schleien, 1998). This instrumentalization of leisure has been termed 'purposive leisure' (Shaw & Dawson, 2001). This literature suggests that, to parents, leisure activities fulfil multiple, sometimes contradictory, functions.

Although parents typically value family activities, specific choices about leisure are informed and shaped by family structure (Quarmby & Dagkas, 2010), by social class (Harrington, 2015; Karsten et al., 2015, p. 207) and by gender (Gracia, 2015; Stalp, 2015), as well as by idealised versions of family life (McCabe, 2015, p. 177) and by religiosity (S. T. Agate, Zabriskie, & Eggett, 2007). Moreover, individual members of a family experience leisure differently (Shaw, 1992). In some cases, family activities may not be experienced as leisure at all (Larson et al., 1997; Shaw, 1992, p. 277) but rather as "an ambiguous mix of leisure and care with different degrees of freedom for the parents" (Karsten et al., 2015, p. 169). Indeed, "family activities may not typically be freely chosen, intrinsically motivated, or even necessarily enjoyable" (Hebblethwaite, 2015, p. 360). In particular, women may experience leisure less positively than

other members of a family, and have less access to leisure activities than men (Holman & Epperson, 1984, p. 282; Stalp, 2015, p. 266), although they have a significant influence on family leisure activities.

The emotional labour – or "work" – of organising and managing family activities "falls disproportionately to women" (Craig, 2006; Shaw, 1992, p. 283); motherhood is thus "often experienced as stressful and exhausting" (Shaw, 2008, p. 690). Although there are considerable benefits associated with fathers' direct involvement in children's play (Buswell, Zabriskie, Lundberg, & Hawkins, 2012), a mother's social position influences not only her children's leisure activities but also her husband's experience of leisure with children (Gracia, 2015, p. 300). Although research suggests that couples who engage in shared leisure time may experience lower rates of divorce and separation (Orthner & Mancini, 1990), having children reduces this shared leisure time, and the effects of this are unclear (Flood & Genadek, 2016; Hill, 1988; van Houdt & Poortman, 2018). Nevertheless, "satisfaction with their leisure involvement together is clearly the best predictor of overall satisfaction with family life" (J. R. Agate et al., 2009, p. 218).

Literature on family leisure typically focuses on pre-school and pre-adolescent children; parents may be anxious that "their children will be less interested in family activities and family vacations once they become teenagers." (Shaw, 2008, p. 699), reflecting the influence of different life stages (Larson et al., 1997). In one of the few studies to consider the experience of older children, Zabriskie and McCormick (2003) studied the family leisure experience of families with children aged from 12 to 15. They found that girls reported significantly lower family satisfaction and family leisure involvement than boys (Zabriskie & McCormick, 2003, p. 184), a factor which may be linked to gender differences in adolescents' development. Two separate studies found that adolescents do not identify family activities

amongst their leisure preferences, possibly reflecting the changing needs and increased desire for autonomy experienced at this life stage (Larson et al., 1997, p. 81).

ABOUT THE GAME

The *EXIT* series[3] was launched in 2016 with three titles: *The Abandoned Cabin* (Brand & Brand, 2016a), *The Pharaoh's Tomb* (Brand & Brand, 2016b), and *The Secret Lab* (Brand & Brand, 2016c). Just as Escape Room players try to escape a locked room within a limited time by solving a variety of interlinked puzzles (Nicholson, 2015), in an Escape Room boardgame, players are presented with a series of puzzles to solve in order to 'win' the game. The play experience of an *EXIT* game is, like many boardgames, explicitly material (Rogerson, Gibbs, & Smith, 2016); the games are designed to be destroyed through play. Players must write on components, cut them, or tear them as part of the puzzle solving process. Even so, the games' low cost ensures that they remain a reasonably economical choice for a group – and each is considerably cheaper than a family night at the cinema. In this way, they build on a history of 'single play' games including the popular *How to Host a Murder* series (Hansen, Bonsignore, Ruppel, Visconti, & Kraus, 2013; Pearce, 2001) which was launched in the early 1980s. Each game in these series has a single solution; once played, there is little replayability as participants already know the outcome. More recently, *Legacy* boardgames, which are customised through play, have extended this lack of replayability by modifying – and in some cases destroying – the game components.

METHOD

This autoethnographic study describes an evening of game play

3. The authoritative Boardgame Geek website www.boardgamegeek.com lists 26 Escape Room games that were released in 2018, including a new Exit Kids line. Well-received by critics and players, in 2017, the EXIT series was awarded the prestigious German Kennerspiel des Jahres award and Unlock!, another series of Escape Room boardgames which uses a hybrid app element for resolution of some game elements, won the French As d'Or Jeu de l'année 2017.

in a white, middle-class Australian family. The four participants live together: the first author (A1), her husband, and their daughters . The elder (A2) is aged 20 and in her third year at University, and the younger (A3) is aged 15, with two more years until she finishes high school. Both parents are tertiary educated keen hobbyist boardgamers who have participated actively in local and international boardgaming communities for more than 15 years. A2 and A3 identify strongly as coming from a family which plays boardgames. Although A2 frequently joins her parents to play games at home as well as with friends, A3's gaming preferences are more focused, and she usually prefers to play two-player games with her father.

A1 proposed this project and suggested "an Escape Room game" as a suitable option; A3 chose *The Abandoned Cabin* from two that the family owned but had not played. The family has previously completed several Escape and Puzzle Rooms, which A1 had identified as a good opportunity for a family activity to which everyone could contribute. This aligns with other research findings which show that parents frequently associate family leisure activities with opportunities to promote positive family bonding and connectedness (Hebblethwaite, 2015; Shaw, 2008). The inspiration for this paper came from the family's collective enjoyment of those activities, as well as from prior experience playing the deductive, mystery-themed game *Watson and Holmes* (Castro, 2015). In playing this game with her parents, it became apparent that A2, who had not read a wide range of 'whodunnits', was at a considerable disadvantage due to her lack of knowledge of the genre. This experience highlighted not only the importance of understanding intergenerational play as a family activity but also the need to understand the situated and cultural knowledge that players bring to a game.

The game was played at the family dining table, which doubles as a game table (see Figure 1). The session was video and audio recorded and was professionally transcribed. After checking the

transcript, the authors watched the video recording together and identified several key moments and activities during the session. These moments were selected because they showed interactions between different family members and the game components, or explicit discussion of gameplay elements, and are representative examples of the types of social actions, activities and practices that arose during the gameplay (Heath, Hindmarsh, & Luff, 2010, pp. 82-84). As such, they are the focus of this paper. In the absence of any formal ethics approval process, both A2 and A3 contributed to the authorship of this paper by assisting with selection of vignettes, by reading and commenting on them and an early draft of the paper. Their comments are included here verbatim and influenced the focus and findings of this paper. They had final approval over its contents and over the material discussed, although much of the analysis and the connection to other scholarly work are the work of A1. This aligns with other research within a researcher's own family setting, for example that by Wearing et al. (2015) or by Bean, Bean, and Bean (1999). Their father chose not to participate in this process, but consented both to the recording of the play session and to its use as a research artefact, and read over the paper in draft form. He is referred to as 'Dad' in the transcripts.

igure 1 The game in play. The image shows the players, with A1 to the left, then A2, A3 at the end of the table and 'Dad' opposite.

Data analysis

The SOC model proposed by Conway and Trevillian (2015) offers a framework for understanding interactions during games as occurring at the level of the character, the operator, and the social environment. It builds upon the work of Erving Goffman (Deterding, 2013; Goffman, 1974; Linderoth, 2012) as well as on work from phenomenology, on Actor-Network Theory (Latour, 2005) and on Giddings' discussion of the "Game Event" (Giddings, 2009) to explore the hermeneutic orientation of a player in relation to a game at a given moment. These levels are hierarchical; "One must always exist in the Social World for a Game Event to take place" and "if one's intentionality is oriented towards the Character World … then we take for granted that the player always-already inhabits the Operative and Social World" (Conway & Trevillian, 2015, pp. 72-73) and are intentionally equilibrial in that movement between them is collective and collaborative and requires the work of all participants (Deterding, 2013, p. 62). Importantly, Conway and Trevillian

note the importance of objects as actors in the game: a card showing a knife, for example, is simultaneously a manipulable object in the Social World, a playable/usable "knife card" in the Operative World, and a knife in the Character World. It is through collusion between players and objects that they achieve entry into and maintain a place within the Operative and Character Worlds. In *The Abandoned Cabin*, a Character World interaction would occur if the players referred to the game's setting – "Oh no, we are stuck in a scary cabin". Such comments were made at the start of the play session, when the players were responding to the narrative setup for the game, and frequently referenced other pop culture tropes ("Is it Dr. Frank-N-Furter?" asked A2). During the play itself, the players' activities were more directed towards solving the puzzles than towards role-playing within the setting. Accordingly, this discussion focuses on the Social and Operative interaction levels to identify a distinction between interactions in the Operative World.

In the tradition of ethnomethodology, we examine how the play of the game is accomplished (Kew, 1986; Liberman, 2013). By this, we mean the practices, negotiated activities, and articulation work that are necessary for playing a game, as well as the ways in which these are realised in an intergenerational family setting. In particular, we observe that *control* of the game – in this situation, expressed primarily through control of the physical elements of the game – is fluid and shared amongst the players. This is due both to the orientation of the pieces (small cards, which cannot be seen by all family members) and to the need to coordinate several tasks in first solving puzzles, which may require combination of elements from the supplied clue booklet as well as from cards, then entering the solution on the code wheel (Figure 2), checking and cross-referencing answer cards (Figure 5), locating a reference symbol on an image in the clue booklet (Figure 3), and bringing new elements in to the game by retrieving them from the riddle card deck, removing them from

the booklet, or pressing them out of a card. These individual components are shown below; Figure 4 illustrates their use during play.

Figure 2 The Codewheel. Players align a reference symbol (eg a hexagon) and three-digit solution code (eg 346) to reveal a solution number in the inner row (here: 26). This directs them to the corresponding answer card.

Figure 3 The reference image from the game booklet.

Figure 4 This image shows the components in play. To the left of the image, A1 and A2 are attempting to solve a puzzle, while A3 reaches for the code wheel. This image highlights the different activities involved in solving a puzzle but also the difficulty (especially for 'dad', right) of seeing all of the elements in play.

FINDINGS

We present our findings as a series of five vignettes, each of which focuses on a different behaviour or type of interaction. The first vignette demonstrates this process of learning to use the game and to coordinate its various elements as a puzzle is solved; the second shows a discussion of how to solve a particular puzzle. The third presents an example of explicitly directive 'parenting' behaviour, the fourth highlights an instance where too much knowledge of games was potentially misleading for players. Finally, Vignette 5 shows the family discussing the game as they pack it away.

Vignette 1: Learning to operate the game

This example shows the players attempting to understand how to situate their solution to an early puzzle within the setting of the game and how to coordinate their own activities and the information that they reveal. It therefore focuses on the players' interactions with one another and with the game materials at the Operative level. After they solved the first puzzle, A3 entered their solution on the code wheel (Figure 2) (an activity for which she took responsibility throughout the game) by aligning the puzzle's 'solution' (a 3-digit number) with a reference icon. This reveals a number in a single, central window on the codewheel. This directed the players to answer card seven (see Figure 5), which required them to cross-reference a symbol on an illustration in the supplied booklet (see Figure 3) to retrieve an additional answer card from the deck. It is only after going through this process that the players learn whether their answer was correct, in which case they are directed to add additional riddle cards to the game, or incorrect, in which case they must revisit their solution, potentially by drawing a 'hint' card to help them solve a tricky problem. An example response to an incorrect solution is provided in Vignette 2.

A3: This thing says that … [she peers at the code wheel]

A1:Okay, the little window

A2: But how did you code wheel it?

Dad:[repeats code]

A2: Are they the same numbers on different things, or …

Dad:No, that's the only option.

A2:Okay, so I turned over the answer card seven, "The code may be right. Where do you see the code symbol?" So if we go back …

A1:So, it's on the L. No?

A2:It needs to be on a …

Dad:Where do you see the card symbol?

A2:Oh, wait on riddle card seven …

A1:Wait, there, look.

A2:It means answer card seven, which we do not …

A1:No, it's there. Right? There's L so it's on the safe.

A2:Oh, yeah, it's on the safe. So now I need to look at answer card nine.

A1:Yup.


The code may be right.
Where do you see the code symbol?
9
20
3
1
8
27
24
26
30
13
When you are done,
place this card back
in the stack of Answer Cards!
7

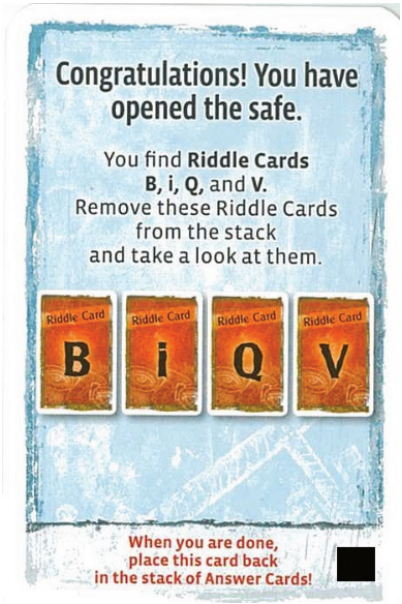

Figure 5 Game components: a pair of Answer cards, showing (a) the requirement to locate a code icon, leading to a more specific Answer card and (b) a specific answer card with instructions to add additional items to the game.

In this play, A2 took responsibility for the decks of cards (riddle cards and answer cards, as well as the unused hint deck) throughout most of the game, although A3 also took on this chore at times during the play. This vignette shows A2 attempting to understand the use of the code wheel, which was led by A3. Although this did not appear to cause conflict during play, in discussing the play some two months later, both A2 and A3 commented unfavourably on the other's taking control of specific components.

A2 notes that these shared operative responsibilities helped to compensate for information being spread all over the table; at

times, she found it difficult to track all the activities on the table as different players took control of cards and objects:

> "The cards were put near me when taken out of the box so it felt natural to take on the task myself. I did feel it made it easier to ensure everyone knew what was going on because they knew I had to give them that information when it became available."

She remains annoyed that her sister had sometimes taken cards directly from the piles without waiting for her to pass them across. These squabbles interrupted the gameplay, downkeying the players into the Social World as they negotiated and resolved them before returning attention to the Operative World.

By contrast, A3 feels strongly that she would have enjoyed the game more if responsibility for these tasks had been varied during the game.

> "Claudia wouldn't let me do anything else but the code wheel was right in front of me … I would have preferred to share the jobs around more and do different things."

To A3, the value of sharing the jobs around was worth the associated risk of being slower to complete the game. This highlights the existence of multiple, sometimes competing goals, which may be highly personal to one member of the family and which may conflict with the stated goal (to complete the game within a given time). For A3, operating the game and interacting with its material components represented a meaningful pleasure of play.

A further source of particular pleasure for A3, a keen photographer, was the opportunity to demonstrate her familiarity with the video camera used to record the session and to take photographs of game components. The game thus offered her a further opportunity – beyond the gameplay – to demonstrate her competence and authority. Even two months

after the game session, she considers her ability to use the video camera an enjoyable highlight of the play.

Vignette 2: Collective problem solving

In this Vignette, the group is responding to an incorrect solution to the riddle card shown in Figure 6. They move between the Character, Social, and Operative Worlds to as they attempt to resolve the problem.

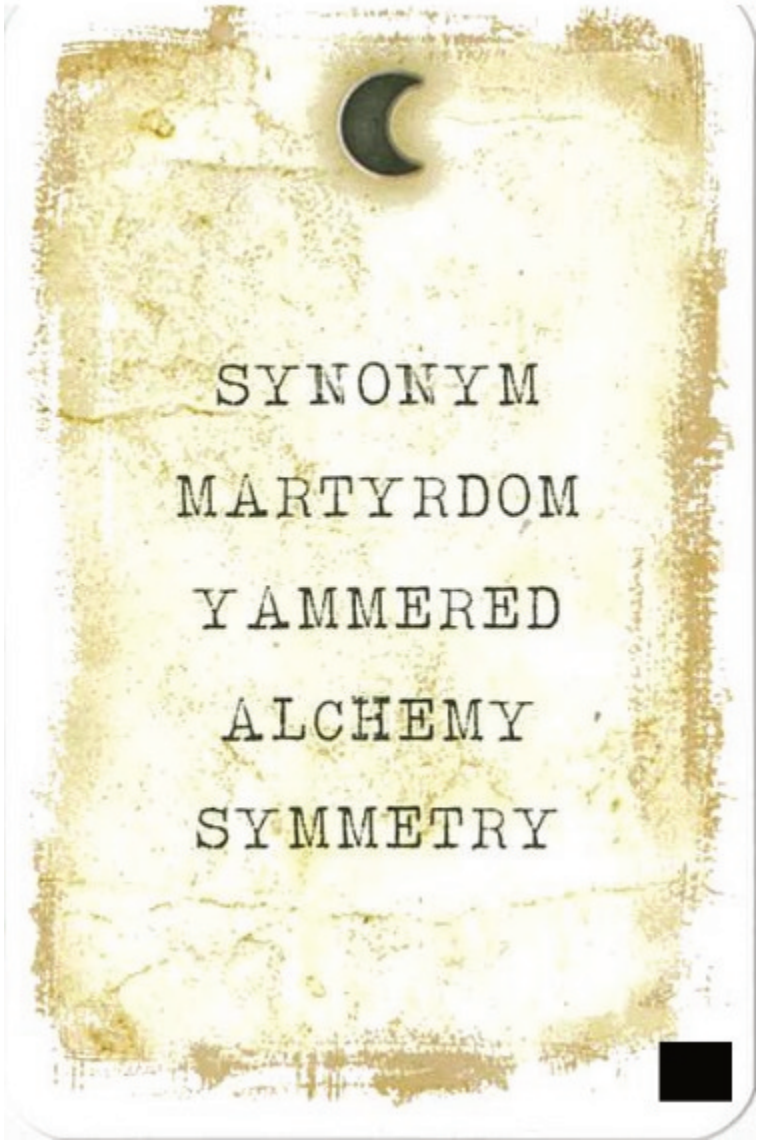

Figure 6 A riddle card

A2:[reading from Answer card] "I guess solving riddles isn't your thing, isn't it? Unfortunately the code is not correct." Just for the record, I'm reading out what this says.

A1:So, I've tried crossing out the Ys and the Ms, because they all have Ys and Ms. They are the only letters that they all have and S-N-O-N-A-R-T-R-D-O-A-E doesn't make sense.

A2:Have we done the moon, right? [reads] "The moon rises in M-A-Y." M dash A dash Y.

A3:How many Ms, how many As, how many Ys?

Dad:Yeah, that's good.

In this example, the players have failed to solve a problem and are brainstorming possible answers. A1 has tried a solution which she is not happy with; A2 identifies an earlier unsolved clue that might be relevant, and A3, the youngest of the group, proposes a new solution. Dad's "Yeah, that's good" refers not to an outcome but to the novel suggested approach. This was something that A3 particularly enjoyed about the game: "it wasn't all easy, and we all got to solve some of the puzzles."

Moments like this demonstrate that a game like this can act as a leveller in family relationships, transcending generational barriers (Costa & Veloso, 2016, pp. 44-45). Although, as we will show, the interactions during this game included directive 'parenting' behaviour, they also provide an environment where both children and parents are free to experiment, to try new approaches, and to negotiate a solution to a shared problem, as well as to share responsibility for the experience and the components.

Vignette 3: Sociality and parenting

Explicitly 'parenting' behaviours (which were frequently directive) represent a specific subcategory of these social interactions. These occurred more frequently during the (extended) setup and packup phases of the game.

Figure 7 Reading the rules.

A1:(reading from the introduction narrative) "What's the game about? You and your friends are in the car on your way to a well-deserved vacation. Your spirits are high, as you talk about spending a few relaxing days on the beach, and lively evenings playing games in your vacation rental. The last thing you need is for your car to break down." … Nell, are you listening?

A3:Um-hum (affirmative)

A1:Good. What's happening, where are we going?

A3:We're going to a vacation …

A1:At the … ?

A1:You weren't listening!

A3:I was!

In this vignette (see Figure 7), A1 is concerned with orchestrating the experience. Her role is not only to play the game but to uphold and enforce family behavioural norms. She is concerned that A3 is missing out on the narrative setup at the start of the game, which may be important as they play. A3 indignantly protests that she is listening, despite being unable to repeat

substantive material, with her echoing of the unfamiliar word 'vacation' suggesting that she is not paying attention to the meaning of the text (Australians would more typically say 'we're going on holiday').

In discussing this vignette, A3 commented that she did not think that the story was important; "I wanted to get straight to the puzzles." Unlike her sister, A2 felt that this scene-setting was valuable "as we were essentially playing out a story of escaping the cabin, it helped connect the game to the feeling of actually doing an Escape Room." For her, the narrative served as a link not only to the activity at hand but also to evoke the broader activity of Escape Rooms which the game attempts to replicate, whereas A3 felt uninterested in that broader context. This highlights the differing experiences of family leisure activities, where family members place different value on elements of the experience, and highlights a potential source of conflict.

Related to this directive behaviour, a Social World activity which we observed throughout the game, rather than within a particular vignette, was praise. Unlike directive parenting behaviours, praise occurred amongst all the participants. In Vignette 2, we see 'dad' praising A3; elsewhere during the session, we observed the parents praising one another, or the children praising a parent or each other for a novel or innovative solution. Players affirm others' suggestions and even their (mutable) roles. "You're the boss," A3 tells A2, describing her control of the riddle and answer cards. Although both A2 and A3 subsequently identified control of cards as a source of ongoing tension and conflict, these comments suggest that it was uncontroversial during play. In some cases, praise is prompted by the answer cards ("Congratulations" or "Very good"), and in others it is spontaneous praise for the group.

Vignette 4: Naïve and extended operative behaviour

In understanding the Operative World (Conway & Trevillian, 2015), we identify a distinction between 'naïve' operation of the game itself, with no external knowledge required, and a more extended operative behaviour, which references the players' understanding of how various forms of "games" – and perhaps explicitly "Escape Rooms" – work, as well as their general and cultural knowledge.

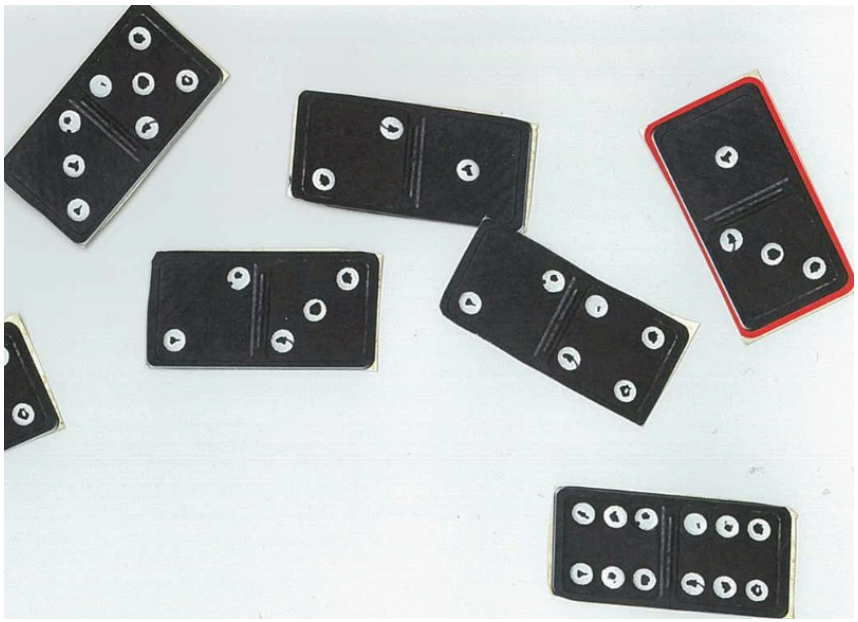

Figure 8 The 'Domino' pieces, cut from the clue booklet. The 1-3 domino (top right) is outlined in red.

[A1 is cutting paper domino shapes (see Figure 8) out of the clue booklet]

Dad:Is there a double six there?

A1:There is a double six.

Dad:You start with the double six.

A1:No you don't.

Dad:Yes, you do.

A1:[emphatically] You start with the one that is outlined in red my friend. And that is a three and a one. It says, look, it shows you very explicitly the first domino is the domino outlined in red.

Dad:So, that's the one? No, that's the first.

A1:And then, that's the last one. Okay. We aren't really playing dominoes.

Figure 9 "Dad" points to the double 6 domino; A1 is cutting out the shapes while A2 is ordering them into a line on the table.

In this example, "dad's" knowledge of the rules of *Dominoes* has the potential to interfere with the family's ability to solve the problem. His familiarity with *Dominoes* as a game invites extended operative behaviour, intruding into and informing the play experience. The design of the game, however, successfully communicates (through outlining one domino in red) that the chain should not in fact begin with the double six because "we aren't really playing dominoes" at all. This is an effective approach for an intergenerational game as it does not

presuppose situated cultural knowledge, but requires players to recognise and acknowledge that this extended operative behaviour is not required within the game.

In this way, *The Abandoned Cabin* successfully privileges naïve and situated knowledge and operation. This contrasts with the game *Watson and Holmes*, which we described earlier, where a player without cultural knowledge of a Golden Age Mystery novel trope (the internal construction of a piano and the potential use of piano wire as a garotte) was unable to successfully solve a scenario.

A3 compares this to her experience playing the *Marvel* themed version of *Codenames* (Chvátil & Sershon, 2017), a clue-giving and deduction game best played with others who share similar knowledge of and exposure to the fictional setting of the *Marvel* movie universe. As a fan of the movie franchise, A3 finds it frustrating and "annoying" to play with A1, who has seen few of the movies and therefore fails to understand the complex clues that A3 provides. To play *Marvel Codenames* requires extended knowledge of the setting rather than simply naïve understanding of the game's operation. The structuring of *The Abandoned Cabin* to support naïve play on both an operational and a cultural knowledge level thus supports intergenerational play by bypassing these opportunities for conflict and confusion – whether it is a parent or a child who holds the additional cultural knowledge.

Vignette 5: Forms of enjoyment

In this vignette, the family is collectively packing up the game and discussing the play experience.

A1:Did you like it, Nellster?

A3:Meh.

A1:Meh? What was meh?

A3:I preferred being inside a room doing an Escape Room.

A1:Okay.

Dad:This is slightly cheaper. [they laugh]

A1:I think they do a good job of capturing that feel though, don't they?

A3:It's less of a big thing though. [she walks out of view, to the video camera]

A1:Yeah, it's not like we did with [family friends] or something. But still kind of nice.

Dad:[spins code wheel] That's cool.

A1:And we could do all of these for the cost of doing one escape room.

Dad:They don't need —

A2:They got a good deal on this.

A1:Cool. Thank you everybody.

Dad:[to A3] Can you turn that off now?

A1:I'll shut it down …

A3:Family hug.

Further conflict between naïve and extended expectations of the game's operation is highlighted in this post-game vignette. As the family packs up the game, they express how much they have enjoyed playing it – but A3 has qualms. The use of the term "Escape Room game" built on her expectations and led her to compare the boardgame unfavourably with her expectations of an Escape Room. A3's feeling that the activity was 'meh' appears to originate in an expectation that she would experience the same sense of surprise and enjoyment and of "unpredictability or novelty" (Zabriskie & McCormick, 2001, p. 284) as she has previously found in an Escape Room. It may also reflect her sense

that escape rooms offer more potential for individual activity and success, where the Exit game generally focused all members of the family on a single puzzle. She found this both enjoyable and frustrating. Nevertheless, A3 is sufficiently happy with the experience to initiate a 'family hug' at its conclusion.

Two months after playing the game, A3 remains uninterested in playing another Escape Room boardgame "but I might play if you ask me to." She prefers the experience of "something that can be replayed, like *Pandemic*[4]." It appears that her cultural expectations of a game as replayable are not met when it can only be used once.

DISCUSSION

The vignettes presented above identify a number of key tensions or issues that surround intergenerational play: coordination of and with players, activities and components; the tension between directive "parenting" behaviours and the desire for free play; and the distinction between "core" and "balance" leisure activities (Zabriskie & McCormick, 2001, p. 283). Moreover, they suggest a possible extension to Conway and Trevillian's SOC model (Conway & Trevillian, 2015) that distinguishes between naïve and extended operation. Lastly, the process of analysis and writing has led us to some methodological considerations about autoethnographic work in the family setting.

Coordination

Coordinating activities or 'chores' (Xu, Barba, Radu, Gandy, & MacIntyre, 2011), an activity that takes place in the Operative World (Conway & Trevillian, 2015), ensures that play continues without interruption and without undue delays. Williams (2018) has suggested that collaborative puzzle-solving builds effective problem-solving and teamwork skills, highlighting that Escape

4. (Leacock, 2007)

Room style games are overtly focused on in-game collaboration. In Vignettes 1 and 2, we see this coordination as an overt activity that is discussed amongst the players. Significant effort is required to keep track of the many pieces in the game as well as the actions of other players – we observed several instances where the players back-tracked to see what had already been solved or acted upon. Moreover, these vignettes demonstrate flexibility in family members' leadership roles, which has been linked to the positive attribute of family adaptability and reflects an ability "to adapt and learn from different experiences and situations" (Zabriskie & McCormick, 2001, p. 281). In a boardgame, in-game cooperation is not just between people but between people and material objects (Conway & Trevillian, 2015; Rogerson, Gibbs, & Smith, 2018).

Parenting

Vignette 3 provides an example of the "emotion work" of articulating play and "facilitating positive experiences and encouraging positive interactions among family" (Shaw, 2008, p. 697) and of teaching and reinforcing desirable behaviours. It demonstrates that parents may "use purposive leisure as a tool for promoting their children's personal growth and skills gain." (Goodenough et al., 2015, p. 379); A1 uses the game setting to encourage and support A3's active listening behaviours[5], playing an "effortful, instrumental" role (Larson et al., 1997, p. 80). Throughout the play session, directive comments and instances of praise highlight A1's role as not only player but also as parent and mother, emphasising the ambiguity of play as both leisure and 'work' for mothers (Cowan, 1983). This links to our earlier finding on in-game cooperation and the value of leadership roles.

Leisure activities

This play session particularly evokes the distinction between

5. This was not a consciously planned part of the session.

'core' and 'balance' activities presented by Zabriskie and McCormick (2001). *Core* family leisure activities are characterised as "common, everyday, low-cost, relatively accessible, and often home-based" (Zabriskie & McCormick, 2001, p. 283). By contrast, *balance* leisure activities "are generally less common and less frequent than core activities and … therefore provide novel experiences" (Zabriskie & McCormick, 2001, p. 283). Thus, "a family that plays board games [sic] once a week" may experience this activity differently than a family which rarely plays boardgames together (Melton, 2017, p. 464). A3's frustrations with the session, at least initially, appear to revolve around a mismatch in expectations, where she associated "Escape Rooms" with novelty and excitement that the boxed game failed to deliver (Vignette 5), although they may also simply echo the finding that teenaged girls between 12-15 may be less satisfied than others with family leisure activities (Zabriskie & McCormick, 2003, p. 184).

Forms of operation

The differing skill levels and cultural knowledge highlighted in Vignette 4 suggests a fruitful extension of the SOC model (Conway & Trevillian, 2015) to split the Operative level to accommodate naïve and extended operation. It builds on understanding of literacies (Bean et al., 1999; Mäyrä, 2017; Zagal, 2010) and gaming capital (Consalvo, 2007; Walsh & Apperley, 2009) to highlight the particular forms of knowledge that boardgamers may bring to the table. What we have termed extended operation is closely related to procedural literacy (Bogost, 2007, 2008), a way of understanding games as games which builds on the particular expertise of the serious hobbyist (Stebbins, 2015).

Methodological considerations

Our final observations relate to the experience of conducting

autoethnographic work in a family setting, and to the collaborative analysis process. These speak once again to family members' differing experiences of family leisure. Although both A2 and A3 were interested in playing the game and in collaborating in the analysis, A3 in particular found it boring and repetitive to rewatch an experience that she had already rated as "Meh," eventually refusing to engage further with the source material. In fact, in the process of rewatching the videos and discussing their experience, both A2 and A3 appeared to become considerably more negatively inclined towards the experience with the passage of time, each focusing on the specific things – often minutiae – that made the play "annoying". A particular source of frustration was the (perceived) loss of control over the material game components – the cards and the code wheel. These frustrations contrast with the many instances of spontaneous praise and evident enjoyment that we observe in the video, suggesting that the process of analysis may have led to a less favourable evaluation of the game.

CONCLUSION

This paper demonstrates that an Escape Room style boardgame provides an enjoyable and interesting opportunity for intergenerational play. It highlights the value of the core and balance model in conceptualising intergenerational play, demonstrating that teenagers and younger children may have differing expectations of the novelty of an activity. There is potential for disappointment when a 'core' playful activity fails to deliver the novelty and excitement of a 'balance' leisure activity. This points to the importance of not overselling an activity as that may raise a participant's expectations and lead to disappointment when the activity fails to meet those inflated standards. This was the primary concern of the youngest player, A3, whose criticisms of the play experience focused primarily on its mismatch with her expectations.

Moreover, this paper extends the SOC model (Conway & Trevillian, 2015) to contrast between naïve and extended operational activities, identifying intergenerational play as an environment that benefits from explicitly rewarding naïve operation over cultural experience. This requirement for naïve operation – or the lack of procedural literacies (Bogost, 2007, 2008) – extends also to the situated cultural knowledge that is used during play. We identify directive "parenting" interactions as a specific subcategory of social activities which may occur during intergenerational play. Further research could examine the extensibility of these findings (beyond an n=1 study) to further explore the value and structure of naïve tasks in the design of games for intergenerational groups.

In addition to the intrinsic benefits of promoting family cohesion and interaction observed in the literature, we demonstrate that intergenerational play provides a structured environment that enables and encourages social interaction. By welcoming teenagers and young adults as equal participants, an Escape Room game encourages a levelling within the usual family hierarchy. Despite this, some parenting behaviours may persist through the articulation activities of the game and particularly during setup and packup. The game's embracing of the naïve framework for operation and knowledge, by providing all required contextual information and by establishing rules for activities that appropriate familiar items like *Dominoes* without adopting their associated rulesets, enables all members of the family to participate as equals in solving the problem.

This cooperation is enacted not only in the puzzle-solving activities but also in the materiality of the game artefact, as the different materials of the game allow each participant to share responsibility for controlling the work of play. Both A2 and A3 pointed to the game's materiality – the opportunities to interact with the pieces – as both a pleasure of play and a discomfort. The game components were a source of tension not only during the

gameplay but even afterwards, as we analysed the play session, as each noted occasions when her sister had taken control of pieces that she would have preferred to administer herself: interacting with the components was enjoyable, sharing the components with other players – especially across the table – was less so. They found it almost distressing to destroy pieces of a game, with A3 in particular noting that she would rather play a game like *Pandemic* that can be replayed. Her preference for a 'real' Escape Room, which also lacks replayability, suggests that it may have been the destruction of the components that she found particularly unsatisfying rather than the lack of replayability.

Nevertheless, *The Abandoned Cabin* provided a playful and enjoyable evening of family leisure for an age and gender group (adolescent women) that has been identified as particularly resistant to family leisure activities. This opportunity for positive interactions amongst family members and for the family to collaborate as a single unit in pursuit of a common goal is both valuable and increasingly rare as children age and develop their own interests. The game presented a variety of challenges and puzzles that allowed each family member to feel that they had taken an important role in solving the mystery regardless of their age, and encouraged the players to play with and manipulate objects in solving puzzles. Our analysis highlights issues relating to the experience of playing the game as well as the experience of observing one's own play. The vignettes presented in this article demonstrate a range of parenting and leisure behaviours which support prior research on intergenerational play and leisure, offering insight into the materiality of play as well as into directive behaviours, praise, and the importance of controlling game components. They highlight the distributed material practices embedded in the game and the collaboration between objects and players that allow players to operate the game.

ACKNOWLEDGEMENTS

The authors would like to thank 'dad' for his participation in this study.

REFERENCES

Agate, J. R., Zabriskie, R. B., Agate, S. T., & Poff, R. (2009). Family leisure satisfaction and satisfaction with family life. *Journal of Leisure Research, 41*(2), 205-223.

Agate, S. T., Zabriskie, R. B., & Eggett, D. L. (2007). Praying, playing, and successful families: An examination of family religiosity, family leisure, and family functioning. *Marriage & Family Review, 42*(2), 51-75.

Bean, T. W., Bean, S. K., & Bean, K. F. (1999). Intergenerational conversations and two adolescents' multiple literacies: Implications for redefining content area literacy. *Journal of Adolescent & Adult Literacy, 42*(6), 438-448 %@ 1081-3004.

Bogost, I. (2007). *Persuasive Games: The Expressive Power of Videogames*. Cambridge, MA: MIT Press.

Bogost, I. (2008). The Rhetoric of Video Games. In K. Salen (Ed.), *The Ecology of Games: Connecting Youth, Games, and Learning* (pp. 117-140). Cambridge, MA: The MIT Press.

Brand, I., & Brand, M. (2016a). *Exit: The Game – The Abandoned Cabin*. Stuttgart, Germany: KOSMOS.

Brand, I., & Brand, M. (2016b). *Exit: The Game – The Pharaoh's Tomb*. Stuttgart, Germany: KOSMOS.

Brand, I., & Brand, M. (2016c). *Exit: The Game – The Secret Lab*. Stuttgart, Germany: KOSMOS.

Buswell, L., Zabriskie, R. B., Lundberg, N., & Hawkins, A. J.

(2012). The relationship between father involvement in family leisure and family functioning: The importance of daily family leisure. *Leisure Sciences, 34*(2), 172-190.

Castro, J. T. (2015). *Watson & Holmes*. Guyancourt, France: Asmodee. [Boardgame]

Chua, P.-H., Jung, Y., Lwin, M. O., & Theng, Y.-L. (2013). Let's play together: Effects of video-game play on intergenerational perceptions among youth and elderly participants. *Computers in Human Behavior, 29*(6), 2303-2311.

Chvátil, V., & Sershon, C. (2017). *Codenames: Marvel*. Kladno, Czech Republic: Czech Games Edition.

Consalvo, M. (2007). *Cheating : Gaining Advantage in Videogames*. Cambridge, MA: MIT Press.

Conway, S., & Trevillian, A. (2015). "Blackout!" Unpacking the Black Box of the Game Event. *Transactions of the Digital Games Research Association, 2*(1).

Costa, L., & Veloso, A. (2016). Being (Grand) Players: Review of Digital Games and their Potential to Enhance Intergenerational Interactions. *Journal of Intergenerational Relationships, 14*(1), 43-59. doi:10.1080/15350770.2016.1138273

Cowan, R. S. (1983). *More work for mother: The ironies of household technology from the open hearth to the microwave* (Vol. 5131): Basic Books.

Craig, L. (2006). Does Father Care Mean Fathers Share?: A Comparison of How Mothers and Fathers in Intact Families Spend Time with Children. *Gender & Society, 20*(2), 259-281. doi:10.1177/0891243205285212

Deterding, S. (2013). *Modes of Play: A Frame Analytic Account of*

Video Game Play. (PhD PhD Thesis), Universität Hamburg, Hamburg.

Flood, S. M., & Genadek, K. R. (2016). Time for each other: Work and family constraints among couples. *Journal of Marriage and Family, 78*(1), 142-164.

Giddings, S. (2009). Events and collusions: A glossary for the microethnography of video game play. *Games and Culture, 4*(2), 144-157. doi:10.1177/1555412008325485

Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Cambridge, MA, US: Harvard University Press.

Goodenough, A., Waite, S., & Bartlett, J. (2015). Families in the forest: guilt trips, bonding moments and potential springboards. *Annals of Leisure Research, 18*(3), 377-396. doi:10.1080/11745398.2015.1059769

Gracia, P. (2015). Parent–child leisure activities and cultural capital in the United Kingdom: The gendered effects of education and social class. *Social Science Research, 52*, 290-302.

Hallman, B. C., & Benbow, S. M. P. (2007). Family leisure, family photography and zoos: Exploring the emotional geographies of families. *Social & Cultural Geography, 8*(6), 871-888.

Hansen, D., Bonsignore, E., Ruppel, M., Visconti, A., & Kraus, K. (2013). *Designing reusable alternate reality games.* Proceedings of the SIGCHI Conference on Human Factors in Computing Systems.

Harrington, M. (2015). Practices and meaning of purposive family leisure among working-and middle-class families. *Leisure Studies, 34*(4), 471-486.

Haycock, D., & Smith, A. (2014). A family affair? Exploring the influence of childhood sport socialisation on young adults'

leisure-sport careers in north-west England. *Leisure Studies, 33*(3), 285-304.

Heath, C., Hindmarsh, J., & Luff, P. (2010). *Video in Qualitative Research: Analysing Social Interaction in Everyday Life*. London, UK: Sage.

Hebblethwaite, S. (2015). Understanding ambivalence in family leisure among three-generation families: 'It's all part of the package'. *Annals of Leisure Research, 18*(3), 359-376. doi:10.1080/11745398.2015.1063443

Hill, M. S. (1988). Marital stability and spouses' shared time: A multidisciplinary hypothesis. *Journal of Family Issues, 9*(4), 427-451.

Hodge, C. J., Duerden, M. D., Layland, E. K., Lacanienta, A., Goates, M. C., & Niu, X. M. (2017). The Association Between Family Leisure and Family Quality of Life: A Meta-Analysis of Data from Parents and Adolescents. *Journal of Family Theory & Review, 9*(3), 328-346.

Holman, T. B., & Epperson, A. (1984). Family and leisure: A review of the literature with research recommendations. *Journal of Leisure Research, 16*(4), 277-294.

Karsten, L., Kamphuis, A., & Remeijnse, C. (2015). 'Time-out'with the family: the shaping of family leisure in the new urban consumption spaces of cafes, bars and restaurants. *Leisure Studies, 34*(2), 166-181.

Kew, F. (1986). Playing the Game: An Ethnomethodological Perspective. *International Review for the Sociology of Sport, 21*(4), 305-322. doi:10.1177/101269028602100404

Larson, R. W., Gillman, S. A., & Richards, M. H. (1997). Divergent

experiences of family leisure: Fathers, mothers, and young adolescents. *Journal of Leisure Research, 29*(1), 78-97.

Latour, B. (2005). *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford, UK: Oxford University Press.

Leacock, M. (2007). Pandemic. In. Mahopac, NY: Z-Man Games.

Liberman, K. (2013). *More studies in ethnomethodology*. Albany, NY: State University of New York Press.

Linderoth, J. (2012). The effort of being in a fictional world: Upkeyings and laminated frames in MMORPGs. *Symbolic Interaction, 35*(4), 474-492.

Loveday, P. M., Lovell, G. P., & Jones, C. M. (2018). The importance of leisure and the psychological mechanisms involved in living a good life: A content analysis of best-possible-selves texts. *The Journal of Positive Psychology, 13*(1), 18-28.

Mactavish, J. B., & Schleien, S. J. (1998). Playing together growing together: Parents' perspectives on the benefits of family recreation in families that include children with a developmental disability. *Therapeutic Recreation Journal, 32*, 207-230.

Mäyrä, F. (2017, January 2). Retrospect, 2016, 2006, 1996, and beyond. [Web log post] Retrieved from https://fransmayra.fi/2017/01/02/retrospect-2016-2006-1996-and-beyond/

McCabe, S. (2015). Family leisure, opening a window on the meaning of family. *Annals of Leisure Research, 18*(2), 175-179. doi:10.1080/11745398.2015.1063748

Melton, K. K. (2017). Family Activity Model: Crossroads of Activity Environment and Family Interactions in Family Leisure. *Leisure Sciences, 39*(5), 457-473. doi:10.1080/01490400.2017.1333056

Nicholson, S. (2015). Peeking behind the locked door: A survey of escape room facilities. *White Paper available online at http://scottnicholson.com/pubs/erfacwhite.pdf*.

Orthner, D. K., & Mancini, J. A. (1990). Leisure impacts on family interaction and cohesion. *Journal of Leisure Research, 22*(2), 125-137.

Pearce, J. A. (2001). Constructing classroom role playing exercises. *age, 6*, 1.

Quarmby, T., & Dagkas, S. (2010). Children's engagement in leisure time physical activity: exploring family structure as a determinant. *Leisure Studies, 29*(1), 53-66.

Rogerson, M. J., & Gibbs, M. (2018). Finding Time for Tabletop: Boardgame Play and Parenting. *Games and Culture, 13*(3), 280-300. doi:10.1177/1555412016656324

Rogerson, M. J., Gibbs, M., & Smith, W. (2016, May 07 – 12). *"I love all the bits": the materiality of boardgames.* Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, San Jose, CA, USA.

Rogerson, M. J., Gibbs, M., & Smith, W. (2018). *Cooperating to Compete: the Mutuality of Cooperation and Competition in Boardgame Play.* Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems, Montreal QC, Canada.

Roggman, L. A., Boyce, L., Cook, G. A., Christiansen, K., & Jones, D. (2007). Playing with daddy: Social toy play, early head start, and developmental outcomes. *Fathering: A Journal of Theory, Research, and Practice about Men as Fathers, 2*(1), 83.

Schwab, K. A., & Dustin, D. L. (2015). Towards a model of optimal family leisure. *Annals of Leisure Research, 18*(2), 180-204.

Shaw, S. M. (1992). Dereifying family leisure: An examination

of women's and men's everyday experiences and perceptions of family time. *Leisure Sciences, 14*(4), 271-286.

Shaw, S. M. (2008). Family leisure and changing ideologies of parenthood. *Sociology Compass, 2*(2), 688-703.

Shaw, S. M., & Dawson, D. (2001). Purposive leisure: Examining parental discourses on family activities. *Leisure Sciences, 23*(4), 217-231.

Stalp, M. C. (2015). Girls Just Want to Have Fun (Too): Complicating the Study of Femininity and Women's Leisure. *Sociology Compass, 9*(4), 261-271.

Stebbins, R. A. (2015). Hobbyist Play. In *The Interrelationship of Leisure and Play: Play as Leisure, Leisure as Play* (pp. 129-149). London, UK: Palgrave Macmillan UK.

van Houdt, K., & Poortman, A.-R. (2018). Joint lifestyles and the risk of union dissolution: Differences between marriage and cohabitation. *Demographic Research, 39*, 431-458.

Vetere, F., Davis, H., Gibbs, M. R., Francis, P., & Howard, S. (2006). *A magic box for understanding intergenerational play.* CHI 2006 Extended Abstracts on Human Factors in Computing Systems, Montréal, Canada.

Walsh, C., & Apperley, T. (2009). *Gaming capital: Rethinking literacy.* Changing Climates: Education for sustainable futures. Proceedings of the AARE 2008 International Education Research Conference, 30 Nov – 4 Dec 2008, Queensland University of Technology, Australia.

Wearing, S. L., Wearing, J., McDonald, M., & Wearing, M. (2015). Leisure in a world of 'com-pu-pu-pu-pu-pu-pu-pu-pu-pu-pu-puter-puter, puter games': a father and son conversation. *Annals*

of Leisure Research, 18(2), 219-234. doi:10.1080/11745398.2014.996764

Williams, P. (2018). *Using escape room-like puzzles to teach undergraduate students effective and efficient group process skills.* 2018 IEEE Integrated STEM Education Conference (ISEC).

Xu, Y., Barba, E., Radu, I., Gandy, M., & MacIntyre, B. (2011). *Chores are fun: Understanding social play in board games for digital tabletop game design.* DiGRA '11 – Proceedings of the 2011 DiGRA International Conference: Think Design Play, Utrecht, The Netherlands.

Zabriskie, R. B., & McCormick, B. P. (2001). The influences of family leisure patterns on perceptions of family functioning. *Family Relations, 50*(3), 281-289.

Zabriskie, R. B., & McCormick, B. P. (2003). Parent and child perspectives of family leisure involvement and satisfaction with family life. *Journal of Leisure Research, 35*(2), 163-189.

Zagal, J. P. (2010). *Ludoliteracy: Defining, Understanding, and Supporting Games Education*. Pittsburgh, PA: ETC Press.