THE SIGNIFICANCE OF PLAYING DRESS UP GAMES ON CHILDREN'S MATERIALISM

Nurist Surayya[a]*, Djoko Setyabudi[a]

[a]*Communications Department, Diponegoro University, Semarang 50275, Indonesia*

Abstract

Concerns about materialism among children are strengthening. Media, especially television and advertising, are acknowledged to be an extensive channel that promotes materialism. Recently, dress up role-playing games, which are mushrooming in online space and mostly played by girls and female adolescents, facilitate active experiences of bountiful consumption simulations. The present study identifies the influence of dress up games on socializing materialism in children. Based on a survey of 144 young girls aged 7 to 13 in Semarang, Indonesia, the findings indicate that the frequency of dress up gameplay influences children to become materialistic. However, the effect of dress up gameplay is not significant when age and motivation to play are included in the analysis.

Keywords: Dress up games, children, adolescents, materialism

*Corresponding author.
E-mail address:* nurist.surayya@undip.ac.id

1. Introduction

The escalating growth of role playing games (RPG) in the last thirty years has developed into remarkable forms and evolved into various styles, including both digital and non-digital media (Hitchen & Drachen, 2008). One of the prominent growing forms of digital role playing games is the Dress Up game (Ludika, 2007). Dress up games, as well as make over and cooking games, are also popular as "pink games" as these contain more social game elements and are targeted at girls (Jansz & Vosmeer, 2009). The first type of dress up games, called "Barbie Fashion Designer", were introduced in 1997 and had successfully sold over 600 000 copies in its first year (Dickey, 2006). Ever since, it led to the proliferation of many similar small, fast-paced, online 'casual games' (Pratchett in Rideout et al., 2005), which led to the expansion of pink online role-playing games (Van Reijmersdal et al., 2013). Such games have been very successful in attracting girls and female adolescents (Jansz & Vosmeer, 2009), and are included among the ten most played game genres, online and offline, among children aged six to twelve years in the UK (Pratchett, 2005). Although the dress-up game is a rapidly expanding play genre in the digital sphere, it appears to be one that is understudied (Ludika, 2007).

Generally, there are two models of dress up play: Doll-Play and Identity Play. In the doll-play model, the player plays the role of a god-like agency; prettifying a character, which is distinct from the player herself. In Identity play that is also popular as the Avatar or Costume play, the player appears as the character in the game who puts on attire for herself. Hence, unlike Doll-Play, the character in the identity play is merely considered a form of personal expression (Ludika, 2007). Generally, these games simulate clothing and apparels for various possibilities. Dress up games allow players to literally "clothe for the occasion", where they can modify the character's appearance for a specific venue or theme (Ludika, 2007). Players can simply use several clothes to mix and match accordingly and try various fashion styles. In this way, these games provide children with opportunities to experiment with different identities (Olson, 2010), thus allowing players to play around with different preferences. Findings have indicated that one of important motives to play a virtual fashion model was because the games can provide the players with opportunities to learn what it is like to be a model (Reijmersdal et al, 2013). Game players can act in ways that are congruent with idealized views of the self and can experience abilities and satisfactions that are difficult to access in everyday life (Rigby & Ryan in Przybylski, 2011, p. 2).

In these games, players can experiment with numerous virtual-reality simulations of commodities and consumption experiences (Molesworth, 2007, p. 2). In these dress up games, players encounter and participate in virtual consumption of various apparels, jewelries and

other fashion commodities during gameplay. This may evoke the pleasure of consumption and of having ample material belongings (Mayra, 2008). Although the consumption here exists merely in the imagination, Jenkins (2011) argues that the imagined events have very real effects on material reality as it stimulates the player to behave in particular ways that would allow the imagined things to become tangible in some form or another. Seen in this light, consumption in the virtual worlds may be disguised as marketing tools for promoting greater real-world consumption (Lin, 2008 instigating the player to become materialistic.

These arguments appear to justify the proliferating concerns that today's children are becoming more materialistic than ever (Banerjee & Dittmar, 2008). Reports based on surveys of children in the US and the UK reveal that "being rich" is children's top ambition (Brown & Schor in Dittmar, 2008). These concerns are mostly related to the negative consequences of materialism that have been empirically correlated with low levels of happiness and life satisfaction (Belk 1984). Additionally, children's acquisitiveness for products by virtue of materialism can arouse in them hostile and selfish behaviour, further impacting on their personal and social development causing them to be discontented and pessimistic (Achenreiner, 1997). These detrimental effects are due to the fact that materialism is an individualistic value that prioritizes the accumulation of possessions as life's central undertaking. The more materialistic an individual is, the more he or she is prone to be avaricious and accentuate material possessions (Belk, 1984). Studies also indicate that more materialistic youth tend to shop more and save less (Goldberg et al., 2003), as well as be compulsive buyers (Dittmar, 2005). Accordingly, many studies continuously investigate the causes of materialism (Flouri, 1999) and specific socialization mechanisms that promote and strengthen materialistic beliefs, values, and behaviours in children that are considered to remain under- explored (Dittmar, 2008).

Media has been acknowledged to be an extensive promoter of materialism, as it facilitates marketers to encourage a need for materialistic belonging in children (Sirgy et al., 1998), especially through advertisements that construct a "sense of self" between "what we have" and "what we do" (Belk & Pollay, 1985, p. 3). Television advertisements instigate children to want attractive things that results in materialism (Buijzen and Valkenburg, 2003). Many researches in the field of video gameplay have provided evidence about the importance and potential of video games to affect human morals and behavior (Bergent & Davis, 2011), but limited studies have investigated the significance of gameplay on materialism. Therefore, the present study attempts to identify the effects of dress up gameplay on the heightening of the value of materialism among children.

2. Literature Review

Materialism and its effects have captured the interest of many stakeholders, involving parents, marketing practitioners, government regulators, social critics, and researchers. The literature has revealed both positive and negative impacts of materialism, along with the antecedent factors influencing materialism (Duh, 2015). According to Duh (2015), despite innate antecedents— including age, gender and birth order, psychological predictor variables such as attitudes related to money, life satisfaction, self esteem and probing childhood, as well as individual socializations through family, peers, and mass media also play determinant roles in generating materialism. Mass media have been found to significantly influence consumer socialization into materialism (Moschis, 2007). According to Kasser et al. (2004) models of materialistic values are frequently founded in popular culture, media, and advertisements. People who are exposed to materialistic models through modelling (Bandura, cited in Chan, 2013) and internalization (Ryan & Connell as cited in Chan, 2013) are more likely to be materialists than those who are not (Chan, 2013).

Recently, game, which is considered distinct from other narrative media—such as TV or film—in terms of engagement and integration, has also been indicated as a materialism mediator. Digital games facilitate consumers' daydreams engaging them with a wide range of digitally simulated consumption experiences (Molesworth, 2009). Peculiar from other materialism mediators, games provide players with active experiences (Molesworth, 2007), which are essential in the learning process (Gee, 2003).

2.1. Games and Materialism

As a media, game has unique characteristics as it embeds the message over rules in the game. Game emphasizes meaning-making through playful actions. During gameplay, players simultaneously adopt explicit and various implicit game rules, not only telling them how to play, but also what it means to play the game (Mayra, 2008). As in dress up games, during gameplay players learn not only what or how to consume fashion, but also many other implicit rules in consumption, includes having abundant possessions.

Based on the General Learning Model (Buckley & Anderson, 2006), the synergy between an individual and situational variables during gameplay trigger various types of learning, including factual learning, learning behaviours, perceptual learning, changes in attitudes, beliefs, and emotional reactions. The process is mediated by the internal state, which consists of one's physiological arousal, feelings, and cognitions. However, such learning-based chances during gameplay can, in the long-term, change the video game player's personality, traits and abilities. (Buckley & Anderson, cited in Barlett et al, 2009).

In this case, the theory posits that during dress up gameplay, players embrace a materialistic lifestyle through which they become materialists. Nonetheless, limited studies focus on the relationship between gameplay and the adoption of materialism as a lifestyle. A study by Chang and Zhang (2008) investigated the significance of materialism in influencing attitudes and motivation to play online games, but it is still uncertain whether playing games affects players' values regarding consumerism. Meanwhile, other studies indicate playing games does affect consumption preference in which heavy players' preference for consuming media products from Japan were higher than mild and light players (Chen, 2013). Thus, it is hypothesized that heavy dress up players will be more materialistic than those who do not play as heavily. Hence, the following hypothesis was formulated to guide this study.

H1:   The intensity of dress up gameplay has a positive causal effect on materialism among children.

2.2. *Motivation to Play and Materialism*

As learning from game playing is an active process, the players' motivation is a significant variable influencing learning effectiveness. In the case of digital games, the active role of the player is essential in that such games can only function if players engage in a continuous exchange of messages (Wu et al., 2010). Players will find games inherently enjoyable to the extent that the games foster the convergence of players' ideal-self and game-self characteristics. Then, the experiences of ideal-self during gameplay would enhance the players' motivation to play video games which produces short-term effects on emotion. (Przybylski et al., 2012).

Self-Determination Theory (Deci & Ryan, 1985, 2000) contributes a framework to measure a multidimensional conceptualization of motivation that allows the assessment of the level of motivation and type of motivation (Lafrenière et al., 2012, p. 1). Besides, this theory has been widely applied in research on gaming motivation. According to this theory, there are two types of motivations: intrinsic and extrinsic. Intrinsic motivation refers to internal drivers on activities while extrinsic motivation specifies external causes of actions. Based on this theory, Lafrenière et al. (2012) developed a game motivation scale (GAMS) to assess gaming motivation. Players who play because they enjoy exploring the game and improving their skill levels or because they like the thrill and strong sensations the game provides are representative of individuals who are intrinsically motivated. In comparison, extrinsically motivated individuals do not participate in an activity for the inherent pleasure they may experience while performing it, but rather in order to receive something positive or to avoid something negative

that is separate from the activity. Players who play to obtain in-game awards, such as rare items, virtual currency, experience points, or to gain admiration and recognition from other players represent individuals who are extrinsically motivated.

However, in the field of gaming research, limited references explore the role of player motivation on attitudes or belief changes. Chang and Zhang's (2008) study indicate players' attitudes to materialism are associated with their motivation for gaming. As players are increasingly motivated to play the game, they start to enjoy the gameplay which heightens the consequences. Motivation is significantly related to positive learning outcomes (Pavlas, 2010). Thus, this study hypothesizes that motivation will increase gameplay effects of materialism on players.

H2: The effect of dress up gameplay intensity on materialism is influenced by motivation to play: the more motivated children are to play, the more materialistic they will become.

2.3. Materialism Among Children

Prior studies posit that the development of materialism in children is age related (Chan, 2006). Materialism, as integrated in the socialization process of children as consumers, occurs in the context of cognitive and social developments. Consumer socialization can be considered a developmental process that progresses through a series of stages—the perceptual stage, the analytical stage, and the reflective stage—as children grow into adult consumers (John, 1999). Children in the perceptual stage are characterized by perceptual features and distinctions, often based on a single dimension or attribute, and represented in terms of concrete details from their own observations. In the analytical stage, children have better a understanding of the marketplace and more complex knowledge and new perspectives beyond their own feelings and motives (John, 1999). Important consumer development takes place, resulting in more symbolic thinking and a more abstract understanding. It is at this stage that they perceive that more possessions could bring them more fun and more friends (Chan, 2006). In the reflective stage, as their information processing and social skills get more sophisticated, children can have more a complicated understanding about the marketplace (John, 1999). They begin to understand the value of possessions based on social meaning, significance, and scarcity (Chan, 2006).

In Chan's (2006) study, there were significant differences on children's perceptions about material possessions, social meaning and significance depending on the stage they are at. Children in the reflective stage have a more complex understanding. Younger children seem

to idealize wealth, while older children displayed unfavourable evaluations of the personality of the child with a lot of possessions. Hence, it is expected that the effects of game play on players' materialism differ across age which was hypothesized for this study as

H3: The effect of dress up gameplay intensity and motivations on materialism is influenced by children's age: As children grow older, the effect of gameplay and motivations on materialism is reduced.

3. Methods

3.1. Participants

The data collection was conducted in May 2015. Participants were recruited from two private elementary schools in Semarang, Indonesia. The total of 144 young girls who recently played dress-up game, both online or offline in various platforms, participated in the survey. The participants' ages ranged from 7 to 13 years old (M=9.62, SD=1.439). The detailed breakdown of the participants' age was 7 years old (n =12, 8.3%), 8 years old (n=20, 13.9%), 9 years old (n=35, 24.3%), 10 years old (n=38, 26.4%), 11 years old (n=24, 16.7%), 12 years old (n=13, 9%) and 13 years old (n=2, 1.4%).

3.2. Measures

To assess gameplay intensity, participants were asked the amount of time they spent playing dress up games on a daily basis. Children were asked to answer questions such as "how long they usually play dress up games?" on weekdays and weekends by responding to options, ranging from "less than ten minutes a day" up to "more than five hours".

To assess gameplay motivation, the Gaming Motivation Scale (GAMS) from Lafrenière, et al. (2012) was employed in this study. However, the measurement was merely adopted to gauge intrinsic and extrinsic regulations based on the Self Determination Theory. Participants were asked to respond to 15 items such as ''Why do you play video games?''. Each answer was rated on a 5- point Likert scale ranging from (1) do not agree to (5) strongly agree.

To assess the effect on children's materialism, the Material Values Scale for children (MVSc) from Opree, et al. (2011) was adopted. The measurement consists of 18 statements to measure three main points: material centrality, material happiness, and material success. Each response was rated from (1) no, not at all to (5) yes, very much.

4. Results

4.1. Descriptive Data

4.1.1. Dress Up Gameplay Habit

The habit of playing dress up games among girls tends to be high. On an average daily basis of gameplay, 15.3% participants play for less than ten minutes, 36.1% play for about a half hour, 23.6% play for an hour on average daily and 25 % participants said they play for more than an hour per day.

4.1.2. Motivations to Play

The findings also indicate a tendency of high motivation to play (M=43.45 SD=14.809). When children were asked the reasons why they play such games, most conceded that playing such games is an interesting and challenging activity (M=8.27 SD=2.16). The participants also pointed out the pleasure of experiencing new game options, which in this case, includes new styles, new appeals, new apparels and so on. (M=7.53, SD=2.51).

4.1.3. Children's Materialism

The data showed that the indicators of children's materialism in this study mostly have high scores. Most participants perceive that having a lot of money can make them happy (M=6.87) and having much money is a priority (M=6.54). The participants also responded they would be unhappy if they do not get what they want (M=6.46). On average, the participants' materialism tends to be high. The details of the participants' motivation and materialism value are described in the tables in the Appendix A & B. Descriptive statistics, and inter-item correlations are shown in Table 1 below.

Table 1. Descriptive Statistics

	Mean	Std. Dev.	Inter-item correlation			
			Children's Age	Dress Up Gameplay	Motivation	Materialism
Children's Age	9.62	1.439	1	-0.077	-0.382	-0.331
Dress Up Gameplay	4.83	2.281	-0.077	1	0.124	0.167
Motivation	43.35	14.809	-0.382	0.124	1	0.461
Materialism	45.06	14.727	-0.331	0.167	0.461	1

4.2. Effects of Game, Age and Motivations on Children's Materialism

4.2.1. Dress Up Gameplay Effect on Children's Materialism

To test Hypothesis 1 for gameplay influence on children's materialism, regression analysis was performed. The result established that the amount of dress up gameplay contributes significantly to children's materialism (Refer to Table 2). Gameplay provides 2.8 percent of the variance for children materialism. The positive beta coefficient also indicated that the longer children play dress up games, the more likely they become more materialistic ($\beta=1.08$, $t=2.023$, $p<0.05$). Therefore, Hypothesis 1 was supported by the findings (Table 2). As predicted, media - in this case, digital games - plays a significant role in fertilizing and nurturing materialism (Buijzen & Valkenburg, 2003). The empirical data from this study further support the importance of dress up games in fostering materialism among children.

Table 2. Model 1

Model 1					
F=4.091 df=1 Residual df=142					
	B	Std. Error	Beta	t	p
Dress Up Gameplay	1.08	0.534	0.167	2	0.045*
R		0.167			
R Square		0.028			
Std Error		14.571			

Dependent variable: Children's Materialism. Significant at the 0.05 level (2-tailed)

4.2.2. Effects of Gameplay, Motivations and Age on Children's Materialism

To determine if the amount of gameplay will continue to predict children's materialism after taking into consideration other variables, hierarchical regression analyses were performed. The results of the analyses were used to estimate the incremental and total variance associated with materialism, and are reported in Table 3 below.

Table 3. Model 2 & 3. Hierarchical Regression on Materialism

Model 2			
F=20.472 df1=1 df2=141 P<0.01			
	Standardized Beta	t	p
Amount Dress Up Gameplay	0.112	1.495	0.137***
Motivation	0.447	5.987	0.000*
R Model 2	0.474		
R Square	0.225		

Adjusted R Square	0.214		
R Square Change	0.197		

Model 3
F=15.713   df1=1   df2=140   P<0.01

	Standardized Beta	t	p
Amount Dress Up Gameplay	0.106	1.443	0.151***
Motivation	0.380	4.780	0.000*
Children's Age	-0.177	-2.242	0.027**
R Model 3	0.502		
R Square	0.252		
Adjusted R Square	0.236		
R Square Change	0.027		

Note: Significant (2-tailed) at the level *P <0.001 **P<0.05 and not significant ***P>0.05

In model 2, it can be seen that the extent of dress up gameplay and motivation variables altogether accounts for 22.5% of the variance in the participants' materialism. Nevertheless, as indicated in the first block (Model 2) in Table 3, the amount of gameplay variable (β=0.112, t=1.495, p>0.05) is not significant in the model. On the other hand, children's motivations to play games (p<0.001) is significant in the second model. The standardized beta (β=0.447, t=5.987) indicates a substantial effect of motivation on materialism. R square change from the first model is 0.197, which establishes that the contribution of motivation to the materialism variability is 19.7%. The positive beta coefficient of this variable demonstrates that the players' increased motivation to play the game predicts a higher materialism.

Model 3 describes the result of dress up gameplay on materialism by taking motivation and children's age variables into consideration. As predicted, the findings suggest that in the third model, age does influence materialism in children. Although the amount of gameplay variable does not significantly predict materialism (P>0.05), motivation (β=0.380, t=4.780, p<0.05) and children's age (β=-0.177, t=-2.242, p<0.05) are predictive. Thus, Hypotheses 2 and 3 are supported. Children's age as a significant predictor emerged as negative in beta coefficients, meaning that the younger the player, the more likely they would be materialistic. The full model, as shown in the third section (Model 3), explains 25.2% of total variance of children's materialism. The finding also implies that motivation and age are more deterministic of children's materialism than amount of gameplay.

5. Conclusion

In line with previous research, media has been found to have significant effects on children's materialism. As this study confirms, gameplay is associated with heightened materialism in children. However, this study clarifies that although the frequency of dress up

gameplay significantly predicts materialism, when exclusively analyzed without the other predictors, the effect was rather small. Even when other variables are included in the analysis, the frequency of dress up gameplay is not predictive of materialism. This finding suggests that media is not the prominent or primary determinant of materialism socialization in children, as gameplay effect is seen to diminish once the variables of motivation to play and children's age are taken into the consideration. Moreover, the result shows that the participants already scored high on the materialism measure at the outset of the study. It is less likely then, that gameplay alone could still be considered to contribute to heightened materialism as there could be many factors contributing to the development of materialism among children. This result is similar with Buijzen and Valkenburg's study (2003) which found that television advertising only caused small effect size on children's materialism.

Additionally, this study suggests that children's intrinsic and extrinsic drivers to access games are more predictive of materialism socialization. The incremental effect occurs as players are actively engaged in the game due to being highly motivated (Wu et al, 2010). Nonetheless, the present study also confirms the previous finding on the significant influence of age on materialism. As explained in Chan's study (2006), age difference does affect children's perception and importance of material possessions. This implies that younger children are more susceptible to the effects of gameplay on the formation of materialistic attitudes.

To summarize, the present study provides empirical evidence of the significance of gameplay in predicting materialism among children. Online games, with their virtual spaces glorifying consumer culture, can facilitate consumerism learning through active experiences of bountiful consumption simulations. However, this doesn't always appeal to players' attitudes and beliefs. Not all research on video games calls for caution. As Ferguson (2010) argues, the literature has exaggerated the negative effects of games, especially violent games, at the expense of their positive ones and to the detriment of the field. He finds the current "moral panic" (Ferguson, 2010, p. 1) he has observed, consistent with the controversy surrounding any new media.

Although this research provides valuable insights into the influence of online dress up games on materialism among children, it does have its limitations. Despite including several variables that are significant in game effects, this study focuses on media roles on the socialization of children's materialism. Accordingly, the research was designed to capture the most researched constructs relating to materialism in children, with the exclusion of other variables explaining the mechanism of the effects of game on belief and attitudes. Thus, future

researches can be more explorative in predicting the significance of game on influencing values other than materialism and attitudes to learning.

Acknowledgements

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APPENDIX A

Table 4. Children Motivation

	M	SD
Because it is stimulating to play	8.27	2.16
For the pleasure of trying/experiencing new game options	7.52	2.51
For the feeling of efficacy I experience when I play	5.54	2.39
Because it is an extension of me	6.53	2.84
Because it is an integral part of my life	4.5	2.82
Because it is aligned with my personal values	5.22	2.57
Because it is good way to develop important aspects of myself	6.29	2.93
Because it is good way to develop social and intellectual abilities	5.05	2.98
Because it has personal significance to me	7.07	2.85
Because I feel that I must play regularly	4.29	2.92
Because I must play to feel good about myself	4.42	3.09
Because otherwise I would feel bad about myself	4.1	2.79
To acquire powerful and rare items and others	5.94	3.20
For the prestige of being s good player	5.28	3.24
To gain in-game awards and trophies or character level	6.66	3.22

Table 5. Children Materialism

	M	SD
Do you think it's important to own expensive things?	4.94	2.96
Do you think it's important to own a lot of money?	6.54	3.01
Do you think it's important to own expensive clothes?	4.76	2.74
Do you think it's important to own expensive brands?	4.63	2.89
Do you think it's important to be able to buy a lot of things?	5.74	2.99
Do you think it's important get a lot of presents for your birthday?	6.73	3.07
Does buying expensive things make you happy?	6.2	2.76
Does having a lot of Money make you happy?	6.87	2.75
Would you be happier if you owned more clothes that are expensive?	5.97	2.73
Would you be happier if you could buy more brands that are expensive?	5.75	2.87
Would you be happier if you owned more things?	6.18	2.70
Do you feel unhappy if you don't get the things you really want to have?	6.46	2.72
Do you think children having expensive things are more fun than other children?	4.92	2.71
Do you think children having a lot of money are more fun than other children?	4.38	2.59
Do you think children having expensive clothes are more fun than other children?	4.7	2.68
Do you think children like you more if you have many expensive things?	5.35	2.71