

## Age-Appropriate App Ratings for Kids Apps are Inappropriate

### *Parents and Children's App Producers Disagree Over Age-Appropriate Standards*

#### Abstract

**OBJECTIVE:** To quantify the gap between producers/app store ratings of kids' apps and games AND what parents deem as appropriate age for consumption.

**METHODS:** A survey was fielded to a representative sample of 88 married male and female parents with children under the age of 18 living in the household. Parents were shown a sequence of screenshots from 25 different apps that were considered controversial. Parents were asked to choose the minimum age at which they felt these images would be appropriate for their children to use. The average of the ratings given by the parents was then calculated and compared to the rating given by the app store/publisher.

**RESULTS:** A 7.8-year **gap** between what producers and publishers set as a designated minimum age for app consumption, and what parents actually found was acceptable. For example, if an item was marked suitable for a 4 year old to watch or play, parents typically rated the same content as being fitting for a 12 year old.

**CONCLUSIONS:** The survey highlights the failure of the games and app developers' standards to help parents safely select age-appropriate media for their children.

#### WHAT'S KNOWN ON THIS SUBJECT:

No prior data was found on the subject of discrepancy between age-appropriate ratings by developers or app stores vs. what parents felt was appropriate.

#### WHAT THIS STUDY OFFERS:

The study quantifies the "something doesn't feel right" sentiment that parents often have when looking at apps and games in reference to the age appropriateness assigned to the content. This study is the first of its kind to reveal the failure of the games and app developers' standards to help parents safely select age-appropriate media for their children.

The latest survey from leading children's media advocacy company, Magicalis, points towards deep flaws in age-appropriateness ratings given to children's apps and games. The survey found, on average, a 7.8-year gap between what producers and publishers set as a designated minimum age for app consumption, and what parents actually found was acceptable. For example, if an item was marked suitable for a 4 year old to watch or play, parents typically rated the same content as appropriate for a 12 year old.

Considering the fact that over two-thirds of parents who search app stores are looking for age-appropriate apps and games, this indicates a serious problem in how apps are rated and consumed.

The study, conducted at the end of 2014, was aimed at quantifying the "something doesn't feel right" sentiment that parents often have when looking at apps and games in reference to the age appropriateness assigned to the content. Research studies on the topic show that up until somewhere between the age of 5 and 8, parents fully control their child's media consumption. Somewhere during this age range, parents gradually release control and allow kids to download apps and games that the kids choose from their own age category (in the best case). Yet, even when the parents control the process - they do not fully play the apps and games but rely on the rating provided by the publisher. In both cases, when this rating is misleading, it exposes the children to apps and games that are entirely inappropriate for their age. Research studies have identified several potential consequences of exposing children to content that they are not developmentally and cognitively ready for as far as violence, scariness, sexuality, body-image messages, and anti-social behavior, including offensive language. These potential consequences include [phobias, anxiety, nightmares, fears, distorted reality perception, bad sleep, lack of concentration/focus at school and elsewhere, acting out, difficulty relating to other people, profane language, distorted body image perception, prejudice, stereotyping, low self-esteem, depression, eating disorders](#) and more.

### **Survey Outcomes:**

Five specific outcomes were found:

1. An average gap of 7.8 years between what producers set as an acceptable age for app consumption, and the rating that the parent gave for the same item.
2. The hierarchy of the discrepancies across 5 dimensions measured
3. The uniformity in response across socio-economic groups
4. The overall uniformity in response across geographical locations in the US
5. The difference in gender, where fathers were consistently found to be more lenient than mothers.

**Overall, the survey highlights the failure of the games and app developers' standards to help parents safely select age-appropriate media for their children.**

**The survey raises the issue of what is the real basis for the age ratings on the different app stores, and what is the driving force behind these ratings? Are the considerations behind the ratings the child's well-being and his/her behavioral & cognitive development - or is it commercial motivation, marketing and profit optimization?**

### **Elaboration**

The Magicalis team has had a great deal of encounters with adults and parents who considered specific apps and games to be inappropriate for their children because of disturbing graphic content, whether violent, anti-social or sexual, yet were rated as "age-appropriate" for their child. Due to the non-quantitative nature of the problem, the team came up with a way to assign quantitative measure to the issue.

### **Methodology:**

An online survey was fielded in late 2014, to a representative sample of married male and female parents with children under the age of 18 living in the household. Parents were shown a sequence of screenshots from 25 different apps that were considered controversial. Parents were asked to choose the minimum age at which they felt these images would be appropriate for their children to see.

The average of the appropriate age group ratings given by the parents was then calculated and compared to the age group rating given by the app store/publisher.

The images were classified within **5 dimensions: sexual content, anti-social behavior, scariness, violence and portrayal of body image**. Differences were measured according to gender (mothers vs. fathers), geography (East vs. West Coast, Inland vs. Coasts, North vs. South) and income (high vs. low.)

The study is based on 88 completed surveys, which translates to a 10% margin of error on a national scale. For the revealed age gap of 7.8 years between assigned age-appropriateness and expectation of parents, this margin of error translates to "8 months". Whether the gap is 7 years and 4 months or 8 years and 8 months, it makes no impact on the problem the study sheds light upon. With either extreme, the gap is enormous because it falls during the forming years of a child, and signifies a gap to a different [cognitive and behavioral development stage](#).

### Results across Content Categories:

As mentioned earlier, the survey considered five content categories: portrayal of sexuality, anti-social behavior, scariness, violence, and portrayal of body image. Interestingly, the biggest difference in perceived appropriateness – **a gap of 12 years - is related to body image**. This means that what producers deemed fit for a 6 year old, parents felt was appropriate for an 18 year old. Second biggest is **sexuality – 9 year gap**; followed by **anti-social behavior and scariness – 7 year gap**, and the smallest gap is for **violence – 5.5 years**. Body image is something that many parents deal with as early as 3-5th grade ages and it is high on their priority and therefore on their sensitivity list. Combined with the fact that violence, sex and profanity are relatively easier to quantify compared to softer values like empathy, body image and cooperation, for example, and therefore harder to automate in a screening process, it is no surprise those “soft” values got bigger age gap compared to the more traditional aspects like violence and sex that have been screened and in the media focus for many decades. Still, not to be discounted, a 9-year gap when it comes to sexuality, means that a 9 year old child is exposed to sexual content that a mother and father see fit for an 18 year old. This finding also supports the conclusion of the [APA Task Force on the Sexualization of Girls](#) which states that “among the most troubling cultural trends is the objectification of pre-teen girls”.

### Results across Demographics:

When looking at parents’ approval of app content, **gender** seems to play a role. While both mothers and fathers show big gaps compared with actual age ratings, fathers appear to be more lenient. This is especially the case when it comes to violent and scary content. Across the board, mothers feel children should be at least one year older than the age fathers choose to consume the same media content.

**Geography** did not play a role on either comparison - coastal vs inland, South vs North, East vs. West - all differences remaining within the margin of error. Further research might find some small discrepancies, however these would remain inconsequential compared to the overall problem. Our expectation is that they would reflect other factors beyond geography such as religion/family background/ethnicity/others.

There was no discrepancy found between different **socioeconomic** groups; families across all levels of income exhibited similar opinions.

**The Problem:**

Child psychologist [Nadja Reilly](#) points to the enormous gap in child readiness between the app store classification and parents' perception of it, as an indication of potential consequences in children's psychological development: "Having a 6 year old consume messages that are fit for a 14 year old is a serious problem parents cannot afford to ignore."

***Developmental and Behavioral problems depicted by Reilly and other psychologists include:***

1. Most children develop a sound ability to differentiate fantasy from reality as they age, and those who integrate well in school, community, and family life will easily separate even the most realistic virtual worlds of gaming from their real lives. Children who are already at risk, impulsive, prone to steal or act out, who have exposure to family violence, or who are failing in school, may be adversely impacted by exposure to violent content above their age category.
2. Very young children who have not yet incorporated mature social or emotional restraint into their behavior patterns, or children with significant emotional or behavioral problems, may fall under greater adverse influence of repeated offensive language exposure or witnessing violent solutions to social challenges.
3. Graphic depictions of violence or strong sexual content can trouble young viewers, particularly when they have no responsible adult to talk with about what they have encountered.
4. Due to the anonymity effect, a phenomenon encountered in interactive game play, sometimes people abandon their social skills amid the obscurity of identity that occurs in the digital universe. Children, when exposed to content that's inappropriate for their developmental age, may become more rude, and use foul or offensive language.
5. Young children lack the cognitive capacity to evaluate messaging coming from the content they are watching ([https://www.princeton.edu/futureofchildren/publications/docs/18\\_01\\_03.pdf](https://www.princeton.edu/futureofchildren/publications/docs/18_01_03.pdf))
6. Additionally, exposure to sexualized images are linked to depression, low self-esteem and eating disorders in young women, [Sharon Lamb, EdD](#), co-author of "Packaging Girlhood: Rescuing Our Daughters from Marketers' Schemes" (St. Martin's Press, 2006) explained. As 6 year olds are shown messages appropriate for 18 year olds, this concern is growing even stronger.
7. As far as violent media, [psychologist Craig A. Anderson](#) and others concluded that "the evidence strongly suggests that exposure to violent video games is a causal risk factor for increased aggressive behavior, aggressive cognition, and aggressive affect and for decreased empathy and prosocial behavior". This is when the violence is "age-appropriate" – what about when a 4 year old sees content appropriate for an almost 10 year old?

8. Study found that exposure to violent video games desensitized people and caused decreases in helping-related behavior, perceptions, and cognitions. It is expected that for a child who lacks the necessary self-awareness and ability to evaluate his/her reactions, this aspect is reason for even more concern. <http://public.psych.iastate.edu/caa/abstracts/2005-2009/09BA.pdf>

9. In games where killing is incentivized, players act like psychopaths, stripped of empathy and with no fear of consequences for their behavior, a study shows. Same concern as above applies. Additionally, a research published in *Psychological Science*, a journal of the [Association for Psychological Science](http://www.psychologicalscience.org/index.php/news/releases/virtual-avatars-may-impact-real-world-behavior.html) shows that virtual behavior carries over in real life: <http://www.psychologicalscience.org/index.php/news/releases/virtual-avatars-may-impact-real-world-behavior.html>.

“Parents have no choice other than to get highly involved in what their children are doing on their digital devices. The issue is way broader than online predators which thankfully most parents are aware of by now”, says Reilly. “Parents, who know their children and their individual circumstances best, need to make good decisions about what games are best for their children; this means to consider their children’s developmental stage, individual characteristics, social environment, and specific aspects of the games.”

### **Conclusions:**

For a child in his/her forming years to be exposed to content that is not adequate to his/her cognitive and behavioral development, can have deep and long-lasting negative impact. The younger children are, the more vulnerable they are to the messaging and imagery in the app/game - they are most impressionable and cannot distinguish between fantasy and reality, cannot discern motives for violence, and learn by observing and imitating.

Parents and caregivers cannot rely on the app stores’ (including but not limited to apple Appstore, Google Play, Amazon and others) age ratings or on the publisher ratings, as these are dangerously inaccurate; they need to check on their own.

To check, it is not sufficient to glimpse at the app or game - checking needs to include spending some time playing/using the app to see what is really inside. When such preventive measures are ignored, parents can expect significant behavioral impact especially among children who spend more than few minutes a day playing the games/apps. With over 100,000s of apps and games, there are plenty alternatives out there. An item that seems suspicious can be easily replaced with another similar app that **is** age-appropriate.

“Video games are wonderful teachers and motivators, but content matters,” says Craig Anderson psychology professor and researcher of the behavioral effects of video games on children. [...] You can’t, as a parent, just rely on the rating because the rating system doesn’t really capture the potential harmfulness or helpfulness of a game.”

All research on the topic of media influence on children agrees without exception on one point: the firm necessity of parents to be highly attentive to the amount, type and appropriateness of media to which children are exposed.

**About Magicalis Inc.**

Magicalis Inc., the leading children’s media advocacy group developed the Valuelizer™, an app that helps parents discover positive apps & games that reflect their life values and beliefs, and are most suitable for their child’s unique age & character.

The Valuelizer™ is the first-ever commercially impartial crowd-sourced democratic platform, providing a parental control app that allows parents to influence and shape the media available to their children.

For more information, email [Magic@valuelizer.com](mailto:Magic@valuelizer.com) or go to <http://valuelizer.com/contact-us>.