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Nadia Ahmed A. AL Jadidi   
King Faisal University, Saudi Arabia

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## Surveying Parents' Attitudes towards the Hazards of Children's Toys

Nadia Ahmed A. AL Jadidi

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### Abstract

The research aims to reveal the awareness of children's parents about the hazards of their children's toys from the age groups (1-9 years). To examine the extent of their awareness of toy hazards and assess their attitudes towards them, the "case study" method was used. A survey was also built on the hazards of children's toys for this age group. The research attempted to cover most of the common toys available in the Saudi market. A random sample of 422 individuals who deal with children participated in the research. The findings revealed that the sample's responses to the hazards of toys were not reflective of the real risks. Also, most of the respondents do not read the instructions and warnings attached to the game, due to the lack of an approach or plan. In addition, those instructions and warnings are ambiguous and written in a foreign language which makes them difficult to read. They are often covered by the price tag of the game. The results of the qualitative analysis revealed the sample's perceptions of the forms of hazards in toys. Interpretations varied about the sources of hazards and the interpretation of the instructions attached to them. In light of the current findings, the research recommends that the relevant bodies examine toys according to agreed international standards, and increase consumers' awareness of the role of the GCC Standardization Organization (GSO). There should also be a website for them to communicate directly with the consumer, similar to CPSC, and design national notices directed to the Arab consumer in the Arabic language to impose control over these products and thus protect children from threatening their lives.

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### Introduction

Toys are an important and enjoyable part of every child's development, but risks can accompany them too. Most children spend their day with their toys, and adults do not realize that these toys may carry a great danger that they do not see. Nor do they realize how many children have been injured and killed by these toys and that some of these victims could have been saved or injured if their parents had known the hazards of those toys. Given the seriousness of the matter, institutions and organizations concerned with childhood around the world and consumer protection committees have set standard standards for toy specifications and methods for conducting safety tests for them. Many countries have also set standards for safe toys in the world, such as the safety standards for the game in Australia, the standards set by the International Toy Industry Institute (ICTI), ISO, etc.

The US Consumer Protection Committee (CPSC), World Against Dangerous Toys (WATCH), and the American Society for Testing and Materials (ASTM) have also played an important role in publishing requirements for toy specifications to be binding on manufacturers. Antonucci (2007) noted that as a result of the influence of these organizations, millions of toys containing high levels of hazardous substances were recalled. Also, the issue of the security and safety of the toy has become a matter of great interest in the US Congress. Strict laws have been put in place to ensure the safety of children's toys. The recall of millions of toys made in China has brought a new warning to parents. The American Congress attempted to deal with the increased risks posed by children's products by passing the Consumer Product Safety Improvement Act to strengthen the Consumer Protection Committee in 2008 (AAJ, 2010, P13).

Given the importance of the issue of the hazards of toys for children under the age of 14 years, the Gulf countries have attached utmost importance to this issue. Therefore, the Standards Authority for the Cooperation Council for the Arab States of the Gulf issued the Gulf technical regulations for children's toys. It mentioned the target age group, the definition of toys, their hazards and standard specifications, and the laws binding on sale and import in the Gulf countries. Also, it mentioned in the document, "the basic requirements that must be met in children's toys, whether toys produced locally or those that are imported from abroad to any of the member states of the GCC Standardization Organization." The free circulation of any of these toys in the markets of member states is allowed without hindrance at customs ports unless there are other reasons for not trading them, other than their non-conformity with the basic requirements" (GSO, 2018).

It can be seen that the market for children's toys in the Kingdom of Saudi Arabia is very promising. The author noticed when touring shopping centers and children's toy stores that more than 90% of children's toys come from China. Some of them are made of non-compliant materials, such as high-lead plastic, like Barbie dolls. Also, some toys have small detachable parts that little kids can swallow. One of the most serious problems facing the Arab consumer is that many toy alerts are written in a foreign language that he/she may not be familiar with, or they are covered with a paper that hides important information about the toy, such as placing a paper with the price of the toy or catchy phrases for the consumer, despite the warnings and penalties set by the GCC Standardization Organization (GSO, 2017). However, research on the hazards of children's toys is very limited. Therefore, it is necessary to conduct research related to the hazards of children's toys, which would help in enhancing consumer awareness of protecting children from the hazards of their toys.

### **Research Questions**

1. What are the parents' perceptions of the hazards of toys for children of the age groups (1-9 years)?
2. To what extent are parents interested in reading the safety warnings accompanying the toy for children of the age groups (1-9 years)?

### **Research Objectives**

1. To reveal parents' perceptions of the hazards of children's toys from ((1-9 years old).

2. To determine the importance of reading the safety warnings accompanying the toy for children of the age groups (1-9 years) for parents?

## **Theoretical Background**

Today's toys are not your parents' toys. They have evolved with technological development and so have the risks (AAJ, 2010, P3). The advances in technology and knowledge in the field of manufacturing and marketing children's toys have raised new issues regarding the safety of toys. This necessitated amending their basic requirements, especially regarding the prohibition of the use of certain chemicals that cause cancer, genetic defects, allergies, or perfumed substances. Also, the maximum permissible limits for some other substances must have been amended, especially in toys intended for use by children under the age of thirty-six months or toys that children can put in their mouths (2017, GSO). The theoretical framework of the research will address two main domains: the hazards of children's toys and the safety alerts associated with toys.

### **Hazards of Children's Toys**

Although toys provide both fun and entertainment, many of them contain hidden hazards for children. They have been associated with a very large number of injuries. Children can be harmed by unsafe toys in many ways, including falls, suffocation, burns, drowning, and poisoning. In the old days, most parents had common sense in watching out for small objects that could choke a child or sharp pieces that could cause harm. However, today's toys have unseen hazards. The hazard may come from lead, cadmium, asbestos, and other carcinogens that cannot be detected by the eye, or a small magnet that can rip a child from the inside (AAJ, 2010, P3).

A CPSC (2016) report shows that 240,000 toy-related injuries were treated in US hospital emergency departments. Of these, 73% are children under the age of 15; 69% for children 12 years of age or younger; 35% for children under 5 years of age (CPSC, 2016, P3). The CPSC (2017, P3) reports 13 toy-related deaths occurred in 2017 among children under the age of 15, with all victims under the age of 12. Riding toys were associated with seven deaths, with a rate of 54% out of 13 cases. The CPSC (2018, P3) also reports 17 toy-related deaths in 2018 among children under the age of 15. Motorized scooters were linked to three of the 17 deaths, and three deaths were due to motor vehicles. Latex balls and balloons caused three deaths from airway obstruction in the same year. The CPSC (2019, P3) reports 14 toy-related deaths in 2019 among children 14 years of age and younger. Motorcycles caused five deaths, four from driving, and one from falling. The small plastic balls caused four deaths, due to airway obstruction. The CPSC (2020, P3) reports 9 toy-related deaths in 2020 among children 14 years of age or younger. Three deaths were attributed to the balloon and one to the rubber ball, due to airway obstruction. Other deaths included stuffed toys in an unsafe sleeping environment, suffocation or inhalation of small parts of the toy, and suffocation in the toy box. The American Organization for Justice (AAJ, 2010) reported lead poisoning, intestinal perforations, and infanticide. In 2006, 21 million toys were recalled because they contained small magnets that could separate from the toys and cause these problems. In 2007, 34 emergency surgeries were reported to remove small magnets from children's intestines.

The Gulf Cooperation Council also sensed the seriousness of the matter (toy hazards) and established the Gulf Cooperation Council Standardization Organization in 2001. The authority has developed a Gulf technical regulation for product categories that are of priority to member states, including children's toys. Within the framework of building a legislative system to control the safety of products within the market of member states, this regulation has been applied to all products destined for consumer use. The organization issued technical regulations that apply to all types and categories of products, including the Gulf Technical Regulations for Children's Toys (2007). The organization's report showed that 90% of imported children's toys contained harmful substances such as lead. Many children's toys are imported from China for their cheapness and cost compared to locally manufactured toys, therefore, the GCC Standardization Organization set the Gulf technical regulations for children's toys. They aim to define the mandatory requirements for the safety of children's toys, which must be available in all toys before they are displayed or placed on the market and then enjoy the freedom of movement within member states (GSO, 2018, p12). GSO has also developed a system (law) for product safety and market survey. It has put forward explicit provisions for the safety of children's toys. Despite this, there is no direct communication between the GSO and the consumer, allowing the consumer to report the hazards of a product or the existence of annual reports on the toys in the market, and the rates of children's injuries from those toys.

### **Toy Safety Alerts**

Safety alerts are a message accompanying a product to the consumer. Its actual function is to clarify the disadvantages of the product and to send a warning message to the consumer. Manufacturers are required to put these messages on all products, including toys. Given the strong influence of these messages on the consumer, the content of the message may make him refrain from purchasing the product. Therefore, factories resort to professionals to formulate these messages as well as designers to visually influence the audience by manipulating visual design elements (images, colors, and font type). Toth (2009) shows that safety alerts include three main themes influencing the audience: visual design, negative messages, and dangerous communication. Designers have tried to manipulate the three axes to influence consumer decisions to buy the product.

There are several problems associated with these messages, including an attempt to influence the consumer through visual deception of the content of the message. Kostelnick and Roberts (1998) showed that designers may use the Gestalt principle to create contrast between figure and floor to draw attention to the product. Contrast depends on the viewer's ability to perceive the differences in the visual elements, that is, between the figure and the floor, and it is a visual manipulation to draw attention to a specific thing. Color art greatly influences toy safety alerts. Several theorists offered insights into how audiences perceive color. However, it was agreed that all colors affect the surrounding elements, which affects the audience's vision. On the other hand, colors depend on the culture of the audience, so they give a specific meaning according to that culture.

This is in contrast to the method of writing the text by exploiting the type and size of the font, and sometimes writing the message in a language that is unknown or foreign to the country of export, as happens with the Arab countries. The manufacturer and importer may cover this message to make it difficult for the consumer to read it. In addition, the audience's examination of the toy safety alerts requires high visual communication to deal with

language, images, and colors. Unfortunately, toy safety alerts often violate toy safety rules, regulations, and standards.

Also, the audience's previous experiences with the toy safety alerts may shape their visual perceptions of it (Toth, 2009). In addition to the visual design, the alert includes a linguistic aspect. Bernhardt (2003) and Brumberger (2005) tried to understand the text messages of security alerts. They found that some alerts often use small font sizes and inconsistent fonts that are not conducive to the correct understanding of the alert. How will public perceptions of toy safety alerts be shaped if they rely on their past experiences with poorly designed documents? Van and Van (2001) dealt with the linguistic aspects of message construction and focused on analyzing the language of discourse and style of wording and concluded that product warning messages rarely mention the degree of hazard associated with them. Most security notices serve a promotional function. Also, by analyzing the language and the style of drafting, it included documents that carry positive and negative messages. The positive messages included "a tone of politeness, apology, and non-binding rhetoric." The negative messages included (a defeatist tone, no apologies, and no rhetoric). Most of the sentences were passive. One of the results of the study is that the use of discipline strategies has a negative impact on the acceptance of the warning message.

On the other hand, the brief alerts in the text are not useful to the consumer, for example (the hazard of lead poisoning, the toy must be replaced or the company must be contacted). The notice here is brief. But the question is, is it clear? Is it effective? Was the request to remove the toy from the child? Also, the presence of visual and verbal language together in the notification can lead to ambiguity. This may be intended by the manufacturers. The Arab factory and importer resort to these text and visual messages that carry attractive pictures and words that affect the consumer and make him unaware of the hazards of the toy despite the warnings of the GCC Standardization Organization (GSO, 2018). Given the seriousness of the matter, the US Congress renewed product regulations, including toy safety, and passed the Consumer Product Safety Act. This law placed restrictions on illegal toys containing high levels of lead, and this helped the Consumer Protection Committee to do its work (GPO, 2008). The GCC Standardization Organization has also issued a law requiring importers and manufacturers to provide consumer information, including the nature of the information that must be attached to products, its form, and presentation such as warnings, instructions for use, and guidance information to reduce potential risks when using products. It also required them to provide information related to risks that are not clear without sufficient warning to consumers to enable them to assess the hazards involved (GSO 2017, pp.10-11).GSO has established standards and controls regarding the import of children's toys from abroad or manufactured inside. Also, it warned against hiding hazard warnings on the toy and obligated the manufacturer and importer to put instructions on the toys in Arabic (GSO 2018).

Therefore, the safety alerts on the toy must be more personalized to help individuals take appropriate action to protect against hazards. Johnson and Sheehan (2010) stress that all safety information that should be communicated to the consumer should include three elements: the contact identifies the hazard, explains the seriousness of the contact, and tells the consumer how to avoid injury. If the toy reminds of danger, the consumer should be encouraged to keep the toy away from the child. What is meant by dangerous communication in the current research is direct dealing with the toy manually or related to it and using it in different fields of play.

## **Materials and Methods**

The survey focused on toys that are widespread in the Saudi markets, specifically in the regions of (Jeddah, Makkah Al-Mukarramah, Riyadh, and Eastern), which are advertised on TV channels, the Internet, and stores. The case study method was used because it is the most appropriate method for obtaining information and a better understanding of the ideas of the target sample about the risks of the toy and how they face those hazards. It also reveals their reactions to the toy and the safety alerts it carries, the opinions shared by respondents, and their perceptions about the effectiveness of these alerts. Because the current research focuses on the extent of the sample's awareness of the dangers of the game, direct interviews were conducted with the respondents to collect more detailed data as a means of verification in the research.

The research was conducted on a sample of parents of children affiliated with King Faisal University, and they were interviewed at the University's Children's Library, the Al-Bir Association in Al-Ahsa, the Al-Ahsa Girl Association, and the Child Development Center in Al-Ahsa. The researcher set open questions for them to understand their perceptions about the toy itself and the safety notices attached to it, and whether is it dangerous or not. What are the risk factors, from their point of view? A database was collected about the toys that were used in the research, which were presented to the sample, in addition to the toy safety alerts collected from the Internet and stores.

### **Study Sample**

A large sample of 422 participants, who belong to different economic levels, and who have children of the age groups (1-9 years) participated in the research. This sample can be considered diverse and represents significantly different backgrounds. The way they investigate the toy and the safety alerts on it, which concern children of that category, have been scrutinized. It is the category most susceptible to injuries resulting from the use of toys. In addition, the focus was not only on the parents, as they are specifically targeted, because in many cases it is not only the parents who bring toys to the children, but also relatives and friends, and therefore their presence in the sample is very important.

### **Survey**

A field survey was prepared, consisting of three sections:

- 1- General questions that require the participating sample to give their opinions and experiences in dealing with the toy, and it includes eight items, which took eight minutes to be applied.
- 2- The toys intended for children from (1-9 years) years were presented to the sample, and there were 25 toys, with one question: Do you know these toys, do these toys pose a hazard? Identify those hazards. And how can they be avoided? It took 50 minutes to apply.
- 3- Questions related to reading safety warnings on toys and the extent of the sample's interaction with them. It included five items and took ten minutes to apply.

## Designing and Building the Survey Tool

*1- Building the items of the tool:* All the items were obtained through the literature and studies related to them and were divided into three sub-domains, each domain of which measures a specific aspect.

*2- Checking the validity of the tool's content:* using internal consistency by calculating the values of the correlation coefficients between the scores of the sub-domains on the one hand, and their correlation with the total score on the other hand. The results indicated that all correlations are significant at the level of 0.001. This is due to the validity of the selection of the items used, and that the respondents were well acquainted with the objectives of each item. Also, the positive correlations indicate that there is one vector for the survey tool's expressions in its different domains. This means the integration of those aspects logically. It can be reassured that each domain can be considered an external test for the other domain. Factorial validity was also used, as the results indicated a high factorial validity. It, in turn, is an indicator of the sincerity of formation, as the percentage of global variation reached 82.7%.

*3- Estimating the reliability of the tool:* The reliability coefficient was calculated for each of the four domains of the tool using the Keuder-Richardson method (20), and it was found that the reliability coefficient ranged between 0.88 and 0.95. This confirms the internal consistency of the significant and elevated correlations between them. The reliability process was carried out on 100 participants.

## Results

*1- To answer the first research question (What are the parents' perceptions about the hazards of toys directed to children of the age groups (1-9 years) and their knowledge about them?,* the sample was asked eight general questions about the toys they buy for children as shown in Table 1.

Table 1. The Sample's Perceptions about the Hazards of Toys

N	Questions	Yes	No	To some extent
1	Do you read the warnings on the toy before buying it for children?	50.5%	41.7%	7.8%
2	Did you read the instructions for use on the toy before purchasing?	59.2%	33.2%	7.6%
3	Did you read the instructions addressed to any age before purchasing?	59.7%	32.7%	7.6%
4	Do you consider that the toy is from the products of a well-known and reliable company?	29.4%	52.2%	18.1%
5	Are toys associated with restaurant meals hazardous?	14.9%	48.1%	37%
6	Do you know the GCC Standardization Organization (GSO)?	7.3%	88.4%	4.3%
7	Have you seen the Gulf Technical Regulations for Children's Toys?	7.4%	89.3%	3.3%
8	Are you Interested in knowing the source of the toy (country of origin)?	43.9%	27.8%	28.3%



Table 1 shows the inconsistency of the sample responses concerning the variety of hazards posed by toys. A large percentage of the sample is not interested in reading the instructions for using the toy. Most of the sample buy the toy despite reading the warnings and others lacked awareness of the importance of the toy manufacturer being known, in the sense of its credibility. Surprisingly, some respondents simply stated that their children own dangerous toys, such as small magnetic pieces, and that they had not had any problems for many years.

The language of dependency was the dominant language in their conversations. Although the GCC Standardization Organization has been operating since 2004, most respondents do not know about it, and the majority did not know the Gulf technical regulations for children's toys. The purpose of the regulation is to establish nationally recognized safety requirements for children's toys, although this will not eliminate the need to exercise parental responsibility in choosing toys that are appropriate for the child's age or parental supervision in situations where children of different ages deal with toys that may cause them, so the application of this regulation will reduce accidents in normal use, and expected misuse of the toys covered by this regulation.

2- The sample was shown toys directed at children from (1-9 years) that are already popular in the Saudi market, and they were asked the following question: Are the following toys hazardous, identify those hazards, and how can they be avoided? To answer this question, a survey of toys in the Saudi market was conducted and presented to the sample, and their responses were as follows.

Table 2. Sources of Hazard in Children's Toys (1-9 years) according to the Opinions of the Sample

N	The most popular toys in the Saudi market	Sample responses			
		Hazardous	Nonhazardous	Sometimes	Don't know
1.	Rattles and teether toys.	18.8%	63.7%	5.5%	12%
2.	Toys attached to ropes, rubber bands or chains.	31.8%	54.6%	2.8%	10.8%
3.	Rocking horse	55.3%	42.5%	2.2%	-
4.	Stuffed dolls	10.2%	84.4%	1.7%	3.7%
5.	Brides and accessories	15.4%	82.2%	2.4%	-
6.	Colorful plastic ring toys	1.9%	91%	7.1%	-
7.	Color toys such as (face paints)	56.4%	40.8%	1.7%	1.1%
8.	Plastic bathtub toys	22.5%	76%	1.5%	-
9.	Water toys and accessories	37.7%	59.7%	1.4%	1.2%
10.	Colorful building blocks	0.9%	68.7%	19.7%	10.7%
11.	Toys with batteries	18%	50.2%	16.8%	15%
12.	classification toys	7.6%	79.9%	11.6%	0.9%
13.	Push and pull toys	32.7%	66.6%	0.5%	.2%
14.	Guns and pistols of all kinds	64.2%	20.1%	14.5%	1.2%
15.	Bow and arrow toys of all kinds	77.7%	17.8%	4.5%	--
16.	Trampoline	87.9%	10.9%	0.8%	0.4%

N	The most popular toys in the Saudi market	Sample responses			
		Hazardous	Nonhazardous	Sometimes	Don't know
17.	Toy box	18.2%	76.2%	5%	0.6%
18.	Balloons	37.7%	56.2%	5.2%	0.9%
19.	Vehicles of all kinds	18.7%	78.4%	1.3%	1.6%
20.	Toys containing magnets	16.4%	43.5%	24.4%	15.7%
21.	Masks and tents	31.8%	62.1%	2.8%	3.3%
22.	The flying plane	31.8%	62.8%	3.6%	1.8%
23.	Scientific toys that contain: microscope, blank slides, mixing cups, lemon salt (citric acid), gelatin, baking powder, magnifying glass, pipette, measuring spoon, crucible	57.6%	30.7%	8.1%	3.6%
24.	Shrinky Dunk	11.9%	77.3%	7.7%	3.1%
25.	Balance toys	86.7%	11.8%	1.1%	.4%

- *Rattles and teethers*: 18.8% of the sample cited speculative reasons far from the real source of hazard, such as (if there are small pieces in them that the child swallows, the transmission of germs, if they are hard, he may hit his face with them). While the main hazard in these toys is that they are made of materials that cause poisoning to children if they are sucked or chewed, as stated by the Australian Consumer Commission (ACCC, 2013). This reason applies to toys with plastic rings, as 91% of the respondents stated that they do not represent any hazard. As for the colors (face and finger dyes), 40.8% of the respondents stated that they are completely safe, while 56.4% said that they may cause poisoning. As for the painted blocks, 68.7% of the respondents stated that they are safe. Whilst, 76% of the sample stated that plastic bathtub toys are safe and do not have any hazards.

- *Toys Attached to Ropes, Rubber Bands, or Chains*: 31.8% reported a strangulation hazard if the rope was wrapped around the child's neck. This is consistent with Health Canada (2012). Whereas, 54.6% of the sample find that they are completely safe toys despite the warnings on them, especially for children under 3 years old, and that they own these toys and do not intend to get rid of them.

- *The Rocking Horse Toy*: 55.3% of the sample's responses did not express the real source of danger. For example, the sample focused on children falling, and they considered this to be the main cause of hazards. Also, 42.5% of the sample did not find any hazard in it while the real danger is represented by the pegs that represent the horns of the horse on both sides, and that their injury is more serious than the risk of falling, and the rope connected to the toy does not represent any hazard to the sample while it represents a danger suffocation. This result is also confirmed (CPSC, 2010).

- *Stuffed Dolls*: 10.2% of the sample mentioned reasons far from the real danger, such as (if they were torn, and the child put them in his mouth, if they were heavy, they would fall on him, some of them frighten the child, and their clothes are not suitable for his age). 84.4% of the sample find stuffed dolls completely safe. Whereas the danger of these toys lies in the small pieces attached to them, such as eyes, nose, hair, buttons, and accessories

attached. They are often small enough to suffocate a child if plucked and swallowed, as reported by ACCC (2010, 2013).

- *Bride Dolls and Accessories*: 82.2% of the sample indicated that they are safe, and there is no objection to their presence with children. Whilst 15.4% of the sample find that they are dangerous in the form of suffocation, poisoning, and wounds. Some mentioned responses are far from the source of the real hazard, such as (transferring Western culture if its form is inappropriate). The hazards of bride dolls lie in the material of manufacture and their accompanying parts such as accessories. All of these lead to risks of poisoning, suffocation, wounds, and skin sensitivity, especially those that may be connected to wires, batteries, and small magnets (ACCC, 2013).

- *Water Toys and Accessories*: 59.7% of the sample indicated that they do not represent a danger. Also, 37.7% of the sample stated that it may be dangerous according to the age group. This is consistent with some of what Timothy (2002) indicated about the inappropriateness of such toys for the age and size of the child, which leads to drowning or problems in the nose, ear, and eye.

- *Toys with Batteries*: 18% of the sample reported that they are safe, and there is no problem with them being with children. Whereas 50.2% believe that they are completely safe, and batteries in toys cause poisoning if their parts are disassembled and placed in the mouth, as well as in the size of small batteries that may be swallowed and cause blockage in the intestine or throat and may lead to death (ACCC. 2013).

-The classification toy with rotation: 79.9% of the sample responded that it does not cause any danger. Its danger lies in the number of small pegs attached to it and the ease of taking them off and swallowing them, which may cause suffocation.

- *Push and Pull Toys*: 66.6% of the sample did not recognize their danger and stated that they do not represent danger. Their danger lies in the handles and solid joints in these toys, which may be attached with nails that can separate and swallow, as well as the length of the string (ACCC. 2013).

- *Gun and Pistol Toys of All Kinds*: 64.2% of the sample's responses were speculative regarding sources of danger such as (causing furniture to break, leading to child illness, may swallow a bullet). The danger of these toys, as defined by the US Consumer Protection Committee (CPSC, 2010), lies in the fact that fillings run without a string for long distances may cause damage, and they contain chemical powder (such as a pump) that sparks when the trigger is pressed and thermal particles that can hit children's eyes. The force of water in water guns can cause an eye or ear hazard (ACCC, 2021).

- *Arrow and Bow Toys*: 77.7% of the sample stated that they represent hazards (injuries and wounds). Also, concerning trampoline toys, 87.9% of the sample indicated that they represent the hazard of falling only without addressing the safety conditions in these toys such as conditions for edges, height, place in which they are placed, and rules of use in addition to their suitability for the age of the child.

- *The Toy Box*: 76.2% of the sample stated that it does not represent a danger at all, and said (it is dangerous if it contains small pieces that harm the child, or if it is locked inside, it may close on his fingers). The toy box has criteria for its selection set by the ACCC (2013) such as the presence of ventilation holes, the lid should not be heavy, and it should be small in size so that the child cannot enter it.

- *Balloons*: 56.2% of the sample confirmed that they are safe and do not pose any danger. Also, 37.7% stated that they represent a danger (if they explode, the child will be afraid, the force of pumping air in them leads to suffocation, he may tie them on his hand and harm him, terrify the child, containing only helium is dangerous). Because of these reasons, they are far from the real causes, as they cause risks if they are chewed or bubbles are made from them, so the risk is doubled by suffocation and swallowing toxic and carcinogenic liquids (ACCC.2016).

- *Toys That Contain Magnets*: 43.5% of the sample indicated that they do not represent a danger. 16.4% of the sample stated that it causes danger such as poisoning and intestinal perforation. 24.4% cited reasons such as (he might think they are real foods and then swallow them, causing an upset stomach, he might use them incorrectly). These are speculative causes that lead to perforations, bowel obstructions, and poisoning (AAJ, 2010).

- *Masks, Tents, and Helmets*: 62.1% of the sample indicated that they are not dangerous, while 31.8% of the sample stated that they may cause suffocation. ACCC (2013) indicated that there are standards that must be taken into account to be safe to use, the most important of which are the presence of ventilation openings, ease of opening and closing, and even the distances between doors and hinges have been determined. According to Health Canada (2012), tents must be made of non-flammable materials.

- *Flying Planes*: 62.8% of the sample responded that they do not represent a danger, and 31.8% said that they represent a danger because (the plane may fall and cause injuries). Their danger lies in the speed of rotation, with sharp edges causing injuries, as stated by the US Consumer Protection Committee (ASTM, 2017).

- *Scientific Toys*: 57.6% of the sample responded that they represent danger. The reasons were that some of them may cause burns, suffocation, and poisoning. 8.1 percent of the sample mentioned that it may cause danger because lemon salt is dangerous to the child's eyes. An alternative should be put in place if the child does not know the instructions for use. That the toys are dangerous, as confirmed by Timothy (2002), is that some materials may be toxic or flammable, and inhaling the fumes from the interaction of chemicals affects the respiratory system of children and therefore requires adult supervision.

- *Shrinky Dunk Toy*: 77.3% of the sample mentioned that it does not pose a danger. 11.9% stated that the danger lies in injuries, wounds, and burns. Health Canada (2012) stated that the electrical energy needed to operate causes serious burns.

- *Balance Toy*: 86.7% of the sample mentioned the risks of injuries and wounds, classified by WATCH in the list of the ten worst toys of 2011, that it is not suitable for children under 5 years old. The danger of the toy is that

children do not control their balance and revolve around themselves, which causes serious injuries, especially in the brain. WATCH ranked toys, balance, shrinky dunk, bow and arrow, trampoline, and classification with spin in their list of the ten worst toys of 2011 (Altman & Altman, 2011).

*To answer the second research question: To what extent are parents interested in reading the safety warnings accompanying the toy for children of the age groups (1-9 years)?*

The sample was asked five questions about toys and safety warnings on them. One of the common toys was chosen to find out the sample's perceptions about it, by asking multiple-choice questions. The responses to two questions were "Do you know this game? Have you read the safety alerts on it?" The responses were that they know all the toys, and the one shown in particular is very popular, and their children already own it. Their responses were about reading safety warnings on toys, with 24.2% of the sample reading warnings, 53.3% not reading anything written on the toy, "it is enough that my child likes it," and 22.5% not remembering. In general, the sample mentioned that the safety warnings are in English or an unknown language, and there are many of the samples who do not master these foreign languages (the warning text of the sample was translated and put in three images for ease of dealing with it). In addition, the percentage that read safety warnings did not check these notifications or verify their credibility.

*Regarding the question: If you know that a child you know owns a dangerous toy. What would you do? How many children's toys did you get rid of, return to the store, or destroy due to their danger?*

76.8% of the sample stated that they would immediately discard the toy, 9.2% would destroy it, 12.8 would return it to the store, and 1, and 2 would let the child play with it. It is noted that most of the sample will be getting rid of the toy. Also, a small percentage returns it to the store, not because of its danger, but because of its defects. The sample, in addition, indicated the factors that will motivate them to keep the toys first and their suitability for the child's age, then the risks associated with them, followed by the child's interest in toys, then the price. They stated that they would never keep a dangerous toy.

*How many children's toys did you get rid of, return to the store, or destroy due to their danger after reading the safety alerts?*

28.9% of the sample stated that they did not get rid of any game, 10.7% of the sample within the limits of once or twice, 13.7% 2-3 times, 4.3% 3-4 times, 3.3% 5-6 times, 39.1% do not remember. In general, the respondents stated that they did not expect such risks in the toy, and did not give the matter importance.

*- Regarding the question, what is the main purpose, in your opinion, for the presence of safety warnings on the toy?*

86.3% of the sample mentioned the goal of protecting children, 4.9% trusted the manufacturer, 6.2% limited legal procedures, and 2.6% excluded toys from stores.

## **Recommendations and Suggestions**

In light of the study findings, the current research refers to several new research areas, perhaps the most important of which is the design of a new survey that includes a random sample from different regions, which may be at the level of all Gulf countries, to conduct a survey of public opinion about their beliefs and perceptions of toy safety notices, and thus the Arab consumer can be alerted to their dangers. Also, the research recommends that the relevant agencies examine toys according to agreed-upon international standards, and design national safety warnings directed to the Arab consumer, in the Arabic language, thus imposing control over these products and protecting children from a threat to their lives. In addition, there is a need to design educational leaflets in multimedia about the safety of children's toys directed to the Arab public, given the serious damage that toys pose that may endanger children's lives.

Moreover, the standardization organization for the countries of the Cooperation Council for the Arab Gulf States should be introduced more broadly. As 61.6% of the participating sample had not heard of it, or the Gulf technical regulations for children's toys, and activating ways of communicating with the Arab consumer so that they have a website that includes standards and warnings of dangerous toys, and ways to report them. Statistics on injuries resulting from contact with toys are published annually. Furthermore, it is possible to propose a notification for a toy that carries a lot of eye-catching visual stimuli such as a red background, title, and a large image to help the consumer identify the toy. The proposed notice highlights the steps that the consumer needs to take. The dangerous part is marked with a red circle. Competitions can be held among designers to select the best Arabic-language designs.

## **Conclusion**

The problem of the hazards of children's toys in the Arab market has two parts, the consumer part, and the producer and manufacturer part. As for the consumer, he falls prey to the toy's glamorous promotion. The Arab consumer's interest in the hazards of toys is very limited, and he needs a lot of means to raise awareness of the hazards of toys and to increase his culture by reading safety notices in depth so that he can understand and make the right decision regarding the toys that he offers to his child. Research on the hazards of toys reveals that little attention is paid to the textual elements of safety notices related to toys (Van & Van, 2001).

Producers resort to manipulating the text to influence the consumer, such as the use of polite language, illegible small font, and exotic language. The text is devoid of a direct warning to the consumer, and it does not place its hand on the hazard of the toy. Warnings should always contain large, clear images of the product. It grabs the consumer's attention and helps him evaluate the toy before they read any text in the notification. It was also possible to put a distinctive sign on the hazard points of the toy, and this will benefit the Arab consumer who is not fluent in reading foreign languages, which would be an obstacle in the way of understanding the safety warnings on the toy.

The Arab consumer, in addition, needs an interactive platform similar to the CPSC to which he can turn, which

gives him clear updated information about toys in the Arab market, reports on injuries annually, and ways to communicate directly to report injuries and hazardous toys. As for the product and the factory, control over the Arab market must be tightened. Most manufacturers of children's toys resort to using poor and recycled materials to save manufacturing expenses, despite the existence of standard specifications for children's toys. From that control is setting tests for the materials used in the toys, whether it is related to colors or raw materials, to ensure that the toy is safe and not harmful to the health of the child. This specification must be binding on the factory, the merchants, or the party that purchases these toys.

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### **Author Information**

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**Nadia Ahmed A. AL Jadidi**

 <https://orcid.org/0000-0002-0295-7979>

Assistant Professor - Department of Kindergarten

Faculty of Education, King Faisal University

Saudi Arabia

Contact email: [naljadidi@kfu.edu.sa](mailto:naljadidi@kfu.edu.sa)

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