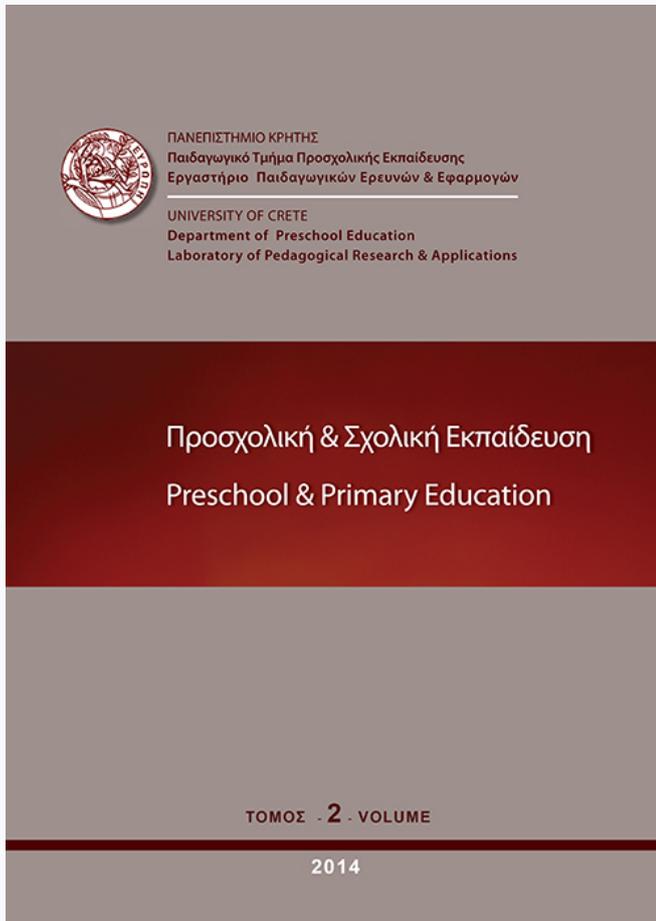


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European and Greek legislation on preschool children's protection from the use of unsafe toys

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Summary. The present study attempts to examine the impact of laws and legislation on the safe construction of toys and their use by young children. The research hypothesis was that the European Union (EU) and its Member States, particularly Greece, implement administrative measures and penalties for the withdrawal of unsafe toys and inform consumers. Content analysis of European and Greek legislation, notifications and penalties imposed on offenders was used to test the hypothesis and the research objectives. The results showed an excessive number of violations of toy safety standards notified to Member States of the EU through the RAPEX system. Greece, despite delayed harmonisation with EU directives and poor information provided to consumers (parents, teachers, children's caregivers, toy librarians), has taken measures to restrict or prevent the distribution of faulty products.

Keywords: commercial toys, safety of toys, protection of preschool children, child consumers

Introduction

The toy is a complex object that cannot be defined by a precise function. It facilitates play but there is no precise definition of what it must be (Brougère, 2006, p. 23). It is linked to the child's need to participate in the playing process using objects from infancy (Trevarthen, 2001). Playing with objects which are not necessarily products (for example, pebbles) is exciting and stimulating for the child because of the uncertainty, the interplay of personal mental reality and the experience of controlling real objects (Winnicott, 1987). It is the connecting link between the child and the environment, the child and society, a way to communicate with adults or other children, to solve problems and in this way foster the creative thinking of the child (Garvey, 1990).

The commercial toy has come to cover the children's lack of contact with nature, and the neighborhood, owing to their confinement inside homes and apartments. Indeed, parents, influenced by the constant media bombardment about the dangers of playing in the streets, oblige their children to stay indoors for safety reasons (Frost, 2010; Zelizer, 1985). Therefore, the commercial toy began as an idea, became a way of life, packed in boxes, standardised, filling the gap created by the modern lifestyle. Most research that has been conducted in recent years confirms this lack of (public) space, time for playing (Hillman, Adams, & Whitelegg, 1990; Hofferth & Sandberg, 2001; Van Gils, 2007) and a 'natural' environment in which children grow up and spend their time (Kehily, 2004, p. 20). Finally,

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commercial toys became an increasingly important tool for children's development, and influenced various aspects of their lives, such as, for example, socializing them to risk and the consequences of their acts (Zelizer, 1985).

The European Union (EU), understanding the important role that toys play in children's lives, has adopted a series of measures related to child protection and consumer information on the specifications which toys should have in order to be safe. The Member States, in line with the EU's directive, have introduced legislation (L), presidential decree (PD) and ministerial decision (MD) for the protection of children from unsafe toys, as required by their Constitution.

Commercial toys and the debate on the commercialisation of childhood

The child today is part of a certain category of people considered to be commercially profitable. This special category creates the need for cultural products and practices distinguishing children from adults (Kehily, 2004). This is not surprising considering that the post-war period in post-industrial and consumer societies, the production and commercial distribution of children's toys increased impressively. Though the toy as a product is commercialised similarly to other products, it differs in its use, which is symbolic and has important ideological and social elements.

So-called 'educational toys' have been on the market since the eighteenth century. According to Cross (1979) this supports the opinion that the more a toy resembles work, the more useful it is. The industrialisation of toys began in the USA in the late-nineteenth century. Until the mid-twentieth century, most American toy manufacturers were small productive units with a limited range of products. These products were distributed by specialised vendors, who informed parents without the mediation of advertising (Cross, 1979, p. 33). The industrialisation of toys evolved over the years and the new term 'commercial toy' appeared. One result of toy industrialisation was the appearance of new factors in children's socialisation, such as the market and the mass media (Gougouli & Kouria, 2000). Competition and television changed toys and the way in which they were distributed¹. Toy advertisements have gone from selling to the parents to addressing the child directly (Pugh, 2005, p. 733) and toys are designed on the basis of children's interests and not according to the needs and values of family and society. They are called modern playthings since they reflect the modern social era and they are an expression of the characteristics of the society that created them. As cultural products they participate in a code messaging service, delivering hidden or obvious messages from production to use.

These messages provoke intense criticism about fashionable playthings which mainly focuses on the fact that they carry messages to children and that they limit their imagination. This in one sense is because of the structural design of the commercial toy (Dixon, 1990). In another sense, the material of which the object is made is a key source of dangerous messages to the child. Barthes (1979) criticises plastic toys and the faithful imitation of the adult world presented by them and favors wood toys, which promote creativity.

Another criticism of commercial toys is the concomitant commercialisation of children's culture (Langer, 2002). As a result of market mechanisms, which are mainly interested in maximising profit,² toys can promote negative values. Marketing strategies, such as advertising in various formats (press, television, radio, etc.), create awareness of false needs in most consumers, let alone the child consumer, and enhance the promotion of toys of questionable quality and fitness for children at an early age (Marcuse, 1964).

There are, however, opponents of these views, who give a positive dimension to the use of commercial toys by saying that the modern toy is the meeting point of the child and

the modern era. Besides, in terms of form and variety, toys do not necessarily determine the content of the playing process and, especially for children of preschool age, according to the theory of Piaget (1979), operate more as an assimilation rather than an adaptation of the subject (Sutton-Smith, 1986). It is also assumed that the commercial toy contributes to a beneficial process of self-fulfillment and establishes the identity of the child in accordance with the assumptions of modern society (Miller, 1987). Children do not copy reality, but mimic the adult world, and often reverses reality depending on the purpose of the game and produces their own interpretations (Brougère & Manson, 1989-90, p. 79; Corsaro, 1997, p. 18-19). In this way, the toy can be defined as a cultural object in the sense of transmitting meanings and as a communicative object (Brougère, 2006, p. 23). It entertains the child and facilitates his/her social relations and competences (Bradley, 1985; Goncu, 1993; Howes, 1992; Mendez, McDermott, & Fantuzzo, 2002) and enhances the expression of his/her ideas and emotions (Linn, 2008). In early childhood, when there is a theoretical and ideological basis for the value of toys in the foundation of later knowledge (Hutt, Tyler, Hutt, & Cristopherson, 1989), the commercial toy, as a means of learning, provides the ideal framework to support this view (Bennett, Wood, & Rogers, 1997). For example the Greek kindergarten curriculum pays special attention to the role of toys as a pedagogical and didactic tool for educating preschool children,³ recognising the influential nature of commercial toys in the educational process. According to the curriculum the child may bring favourite toys to share with other children. It is clear that to achieve the objectives of the curriculum, the toy becomes an assistant and companion to the child in acquiring the knowledge, skills and attitudes which are important for human development (Linn, 2008).

Since the playing process and the overall development of the child may be strengthened and enriched by the modern toy, the selection of appropriate toys is a complex process involving children, parents, teachers, practitioners in childcare settings and toy librarians.

European and Greek legislation on the protection of the child consumer and on unsafe commercial toys

The fast-paced evolution of our society requires continuous oversight of the adequacy of the modern toy and many efforts have been made at a global level (Van Gils, 2007) to develop safety standards⁴ and at European and national levels to protect child consumers.

The first report on child protection within the framework of the European Council was produced in 1989 with the adoption of the Charter of Fundamental Social Rights of Workers.⁵ The Charter is not an institutional text with binding effect on Member States but a general statement of intent. Moreover, the European Parliament adopted in 1991 a report on human rights⁶ and urged Member States to ratify the international treaties with particular reference to the violation of children's rights around the world. In other words, an EU attempt was made to introduce a uniform policy regarding the protection of children's rights. For its part, Greece, with Law no.2251⁷ adopted in 1994, provides state care for consumer protection in general and child consumers in particular.

In the search for a harmonisation measure to guarantee an equally high level of toy safety across the whole Community and to protect children's rights, the EU's publication on Toy Safety Directive 88/378/EEC⁸ urged Member States to adopt a common policy for toy standards. More specifically, the Directive, which consists of 16 articles, defines the toy as 'any product or material designed or clearly intended for use in play by children of less than 14 years of age' [Article 1(1)]. An inadequate toy is defined as an unsafe toy which is a risk to a child's health. In addition, there is comprehensive reference to the terminology of the

toy, the product diversity, its distribution in the market, the obligation of Member States to take appropriate security measures by nominating authorities for this purpose, the obligation of the manufacturer to ensure compliance with basic safety requirements and the provision of a certificate of conformity by the responsible authorities with certain insignia, which according to this Directive comprise the symbol 'CE'. The Directive also refers to the immediate withdrawal and/or removal of any unsafe commercial toy after inspection and provision of immediate information to all relevant authorities and the European Commission. This Directive was superseded by Council Directive 2009/48/EC which applied to toy imports into the EU from 20 July 2011.⁹

With regard to the general safety standards laid down in Directive 88/378/EEC, the users of toys and third parties should be protected from hazards that may result from: physical and mechanical properties, flammability, chemical properties, electrical properties, hygiene and radioactivity. Referring to the physical and mechanical properties, the Directive highlights the risk posed to children by technically inadequate constructions and by unsuitable materials that may have been used. With regard to flammability, importance is given to materials which should not contain substances or mixtures which may ignite. The chemical properties refer to the bioavailability of substances which must not exceed certain values, as defined by Community law and according to scientific evidence. The electrical properties focus on voltage and insulation of all surfaces accessible by children. Prime importance is given to the issue of hygiene, since toys must be designed and constructed to meet hygiene and cleanliness requirements. Finally, toys must not contain radioactive elements or similar substances which could injure a child.¹⁰

Although at the European level the basis for protecting children from unsafe toys was established with the enactment of Directive 88/378/EEC, Greece, several years later, legislated Law no.2251/1994, which refers to consumer protection and includes child consumers in its general provisions. More specifically, this law is a general framework for stringent administrative sanctions on all those involved in the trafficking of unsafe products. The Greek law has a particular interest in child protection by virtue of Article 14 ed.8, which bans television ads with toys as their thematic content between 07.00 and 22.00.

Furthermore, the Greek government wanting to protect children not just from television advertisements but also from unsafe toys in line with Directive 2001/95/EC, produced Joint Ministerial Decision (JMD) no.Z3/2810 in 2004. The JMD nominated as an authority for the purposes of this decision the General Secretariat for Consumer Affairs (NGK) of the Ministry of Development,¹¹ to ensure that both producers and distributors complied with their obligations.

If the NGK finds violations of safety standards, it informs consumers through press releases on the defects, and at the same time contacts the manufacturer or importer of the toy for its immediate withdrawal owing to the nature of the risk posed by its use. Therefore NGK's mission is twofold: it has the authority to monitor toy distribution and the responsibility to inform consumers about unsafe toys immediately.

Today, both European and Greek legislation cover the basic requirements¹² a toy must meet to be qualified as safe.

The Rapid Information System (RAPEX)

The answer to every reasonable question on how Member States are directly informed at Community level was provided in Directive 2001/95/EC, published by the European Parliament and European Council on December 3 2001 on general product safety. The Directive established the Community Rapid Information System (RAPEX),¹³ for the direct exchange of information between Member States and the European Commission concerning measures and actions for products posing a serious risk to the health and safety

of European consumers, given that there are no specific provisions in Community law with the same goal.

NGK is designated in Greece as the contact point with the EU Commission, contributing to the rapid exchange of information and the publication either online or through the press of RAPEX notifications of the EU. Products listed in the weekly RAPEX notifications are either identified by the competent authorities of EU Member States as posing one or more risks and found to be unsafe, leading to a distribution ban on the market, or by the manufactures' or suppliers' notification of a potential risk that products present, leading to a voluntary withdrawal from the market and recall from consumers. The distribution ban may be lifted by an NGK decision if the defect that makes the product unsafe can be corrected and manufacturers take the necessary corrective actions. If competent authorities discover that hazardous products continue circulating in the Greek market, NGK imposes severe administrative sanctions (including confiscation, seizure, removal and fines) in accordance with Article 14 of Law no.2251/94 on all those involved in the trafficking chain of these products in the Greek market.

A brief look at the RAPEX list shows the potential risks posed by modern toys. Blinding rays, sounds that cause deafness, substances that cause intoxication and are carcinogenic, inadequate insulation which may cause electric shock or fire, detachable parts that cause choking, and fraudulent use of trademarks of conformity are just some of the items listed as hazardous to the safety and health of children. According to the Centre for Research and Prevention of Child Accidents of the University of Athens (KEPPA),¹⁴ each year approximately 2300 children are injured by toys and, according to the Consumer Institute,¹⁵ 70% of accidents are caused by unsuitable products/toys, with children under school age being at the top of the vulnerable list.

In an effort to deal with these problems, apart from providing immediate consumer information through the RAPEX system, Greece has also provided a complaints hotline to the Ministry of Labour and Social Security to facilitate public access to its services.¹⁶

Methodology

Objectives and hypotheses

This study aims to describe European legislation on the protection of children from violations of toy safety standards and to examine the impact of laws and legislation on the safe construction of toys and their use by young children. The sources studied are legislative and administrative records as well as judgments of the EU Committees, where standards are set for toy adequacy, and the penalties imposed if toy industries fail to meet the basic standards. The study further aims to discuss the level of care that Greece provides to preschool children vis-à-vis European standards, through consumer information and administrative actions that contribute to the withdrawal of inadequate toys from the market of the country. We focus on early childhood, particularly on children over three years old, because at this age the consciousness and the personality of the person are shaped through models provided by society.

The basic research hypothesis was that Greece, following the general European policy, supports the protection of preschool children from any inadequate toy, by implementing legislative and administrative acts and for this reason we assumed that penalties for offenders are severe.

In particular, the research objectives focused on:

- (1) the content analysis of the primary sources (pieces of legislation, directives and ministerial decisions) and the examination of actions taken by European and Greek legislators to protect children from unsafe toys;
- (2) the examination of Greece's compliance with EU legislation;
- (3) the exploration of the content of notifications provided by the RAPEX system (the Community Rapid Information System) on the circulation of unsafe toys in the EU and the Members' markets, and
- (4) the analysis of Greek sanctions imposed on offenders.

In order to investigate the position of the EU and Greece, records of legislative bodies, governmental and administrative departments were studied at both the European and national level. The content analysis of five formal written texts was chosen as a research method to check the applicability of the law on child-consumer protection from unsafe toys. The texts are presented in chronological order of publication:

- the 88/378/ European Council Directive, which refers to child protection from unsafe toys;
- the Greek Law no.2251/1994 on consumer protection;
- the Directive 2001/95/EC of the European Parliament and of the Council on general product safety;
- the Joint Ministerial Decision Z3/2810/2004, which nominates the competent inspection authorities and their subsequent actions, and
- RAPEX notifications, introduced by Directive 2001/95/EC as a measure to alert member countries to violations of toy safety standards.

First, a qualitative analysis of the above content was performed in order to answer the first two research objectives and to determine the level of care of the EU and Greece towards protection of children from unsafe toys. To answer the third objective of the research, we applied quantitative analysis of the content of RAPEX notifications from the first day of operation in Greece in 2004 until the end of 2010. The material taken from RAPEX was sorted into categories based on standards laid down by Directive 88/378/EEC. The wide range of categorisation is justified because of the large number of requirements toys have to fulfill to qualify as safe regarding: structure, composition, fraudulent use of trademark, unclear instructions for use, mechanical problems, dimensions of detachable parts, loss of buoyancy, loss of support, braking system, projectiles, kinetic energy, high temperature, flammability, explosion, electric shock, ingestion, inhalation, contact with skin, infection and radioactivity.

These variables were analysed in two broad categories, a) safety and b) health, for children above 36 months of age, taking into account the classification of toys in the Guidance Document 11 (06/04/2009) on the application of Directive 88/378/EEC and the principles of Article 2 of the Directive. Finally, we investigated Greece's position in accordance with Law no.2251/94 with regard to the type and number of penalties imposed on all those involved in the trafficking chain of unsafe toys in Greek territory.

Results

According to the two defined categories, a) safety and b) health, we worked through the above content, classifying, underlining, writing marginal notes and interpretive memos, coding and recoding comments on the material. The qualitative content analysis of the above laws and directives, which answers the first two objectives of the research, leads us to the conclusion that there is a linkage, sequence, continuity and identity between the EU directives and Greek laws. There is, however, much delay in the harmonisation of the laws of the Greek State with the EU directives. In an effort to reconcile its position with that of the

EU, it was six years later that Greece passed Law no.2251/1994, which is generic and refers to consumer protection, without mentioning children's toys specifically. In 2001, the EU's Directive 2001/95/EC, taking into account the free movement of goods without internal frontiers, defined measures on general product safety, and established RAPEX for sharing information and enabling rapid intervention by the Member States. Following this directive, in 2004 Greece legislated JMD Z3/2810/2004, incorporating EU Directive 2001/95/EC.

To answer the third research objective, we have analysed the content of six years (2004-10) of RAPEX notifications disseminating information on the distribution of unsafe toys in the EU market. The weekly report of RAPEX notifications traces the circulation of toys that have failed one or more criteria of safety standards, and reports incidents of injury, the country of origin, and the measures adopted for notifying other countries (see Table 1). More specifically, 330 weekly notifications were analysed, and of a total of 8251 unsafe products, 1874 unsafe toys were found for children above 36 months of age, representing 22.71% of the total number of unsafe products. In a period of six years we observed an increase in the distribution of unsafe toys in the European market, and consequently in Greece, because of the overproduction and import of toys from outside the EU. In 2004 the percentage of unsafe toys among unsafe products was 11.25%, in 2005 it was 10.12%, in 2006 it was 10.54%, in 2007 it was 28.91%, in 2008 it was 29.22%, in 2009 it was 27.02% and in 2010 it was 21.92%.

Table 1 An example of the weekly overview report 51 - 2010 of RAPEX notifications concerning unsafe toys

No. Ref.	Notifying country	Product	Danger	Measures adopted by notifying country	Products were found and measures were taken also in:
16 1902/10	Greece	<p>Category: Toys Product: Ride-on toy car (Funny Gear Kid's Rider) Brand: KY Toys Type/number of model: 1693P, Batch number/Barcode: 9 555059 115478 Description: Plastic, ride-on toy car, length: 45 cm. Pink body, orange wheels, telephone and horn, mauve steering wheel and backrest, yellow seat and green front part (products with other colour combinations not affected). Country of origin: China</p> 	<p>Injuries</p> <p>The product poses a risk of injuries because the front axle of the toy could break whilst being used by a child.</p> <p>The product does not comply with the Toys Directive and with the relevant European standard EN 71.</p>	<p>Compulsory measures: Withdrawal from the market ordered by the authorities.</p>	

The country of origin of most unsafe toys (see Table 2) is China, at a rate of 80.90%, as the majority of contemporary toys are manufactured there. The country of origin in second place is unknown, since the origin of the toys is not indicated, at a rate of 5.18%, followed by Hong Kong at 2.24% and Germany at 1.92%.

Table 2 Rapex notifications 2004-10: Countries of Origin of Unsafe Commercial Toys for Children over three years old Distributed in EU

Countries of Origin	Number of observations	Relative frequency (fi %)
China	1516	80.90
Unknown	97	5.18
Hong Kong	42	2.24
Germany	36	1.92
Taiwan	22	1.17
Netherlands	18	.96
Thailand	17	.91
Poland	13	.69
Malaysia	11	.59
Spain	9	.48
Italy	9	.48
Russia	8	.43
France	7	.37
United Kingdom	6	.32
Turkey	6	.32
Belgium	5	.27
U.S.	5	.27
Mexico	5	.27
Sri Lanka	4	.21
Sweden	4	.21
Indonesia	3	.16
Switzerland	3	.16
Czech Republic	3	.16
Philippines	2	.11
Ukraine	2	.11
Latvia	2	.11
Bulgaria	2	.11
Denmark	2	.11
Greece	1	.05
Madagascar	1	.05
Korea	1	.05
North Korea	1	.05
Estonia	1	.05
Ireland	1	.05
Argentina	1	.05
Australia	1	.05
Hungary	1	.05
Israel	1	.05
Romania	1	.05
Total	1874	100

The quantitative analysis of RAPEX contents gives us information on the risks posed by unsafe commercial toys (see Table 3¹⁷). We note that the most common risk is the construction of the toy (26.79%), followed by composition (25.31%) and ingestion of part of the toy (19.39%).

Table 3 Rapex notifications 2004-10: Frequency of Unsafe Features of Toys and Possible Risks for Children over three years old

Toy features involving risk	Number of observations	Relative frequency (%)
construction	702	26.79
composition	663	25.31
fraudulent use of a trademark	13	.50
unclear instructions	65	2.48
mechanical problems	25	.95
dimensions of detachable parts	353	13.47
loss of buoyancy	0	0
loss of support	11	.42
braking System	7	.27
projectiles	42	1.60
kinetic energy	41	1.56
high temperature	38	1.45
Possible risks		
flammability	38	1.45
explosion	3	0.11
electric shock	43	1.64
ingestion	508	19.39
inhalation	33	1.26
contact with skin	6	.23
infection	15	.57
radiation	14	.53
Total	2620	100

Table 4 shows the chronological frequency of risk from 2004 until the end of 2010. For 2004, despite the small sample, the most common risks were construction, projectiles and kinetic energy (15.79% each), followed by composition (10.55%), and less common risks were fraudulent use of a trademark, unclear instructions for use, mechanical problems, the dimensions of detachable parts, flammability, ingestion, inhalation and contact with the skin (5.26% each). For 2005, construction was the most common risk of commercial toys (33.33%), followed by ingestion (19.45%), composition and projectiles (8.33% each). In 2006, construction was once again the most common risk of the commercial toy with 55 reports (28.06%), followed by ingestion (27.55%) and the dimensions of detachable parts (18.37%). In 2007 we saw a significant increase in the risks compared with previous years and the most common risk for this year was composition (30.72%), followed by manufacturing (27.80%), the dimensions of detachable parts (16.82%) and swallowing (11.21%). The four most common risks for 2008 were composition (29.24%), construction (28.57%), swallowing (15.29%) and the dimensions of detachable parts (11.76%). Other risks followed with smaller percentages. In 2009 we saw the same order of risk frequencies with composition the highest (28.72%), followed by construction (28.38%), swallowing (20.85%) and dimensions of detachable toy parts (8.89%). Finally, in 2010 the risk of swallowing toy parts was highest (25.51%), followed by composition (24.09%), construction (21.42%) and the dimensions of detachable parts (17.17%).

Table 4 Annual Breakdown of Rapex Notifications Regarding Unsafe Features of Toys and Possible Risks 2004-10 for Children over three years old

	Relative frequency (%) and number of observations (n)													
	2004		2005		2006		2007		2008		2009		2010	
Toy features involving risk	%	n	%	n	%	n	%	n	%	n	%	n	%	n
construction	15.79	3	33.33	48	28.06	55	27.80	124	28.57	170	28.38	166	21.42	136
composition	10.55	2	8.33	12	8.68	17	30.72	137	29.24	174	28.72	168	24.09	153
fraudulent use of a mark	5.26	1	3.47	5	1.02	2	1.12	5	0	0	0	0	0	0
unclear instructions	5.26	1	4.86	7	4.08	8	4.04	18	3.19	19	1.54	9	.47	3
mechanical problems	5.26	1	0	0	2.04	4	0	0	0	0	1.20	7	2.05	13
dimensions of detachable parts	5.26	1	6.94	10	18.37	36	16.82	75	11.76	70	8.89	52	17.17	109
loss of buoyancy	0	0	0	0	0	0	0	0	0	0	0	0	0	0
loss of support	0	0	0	0	.51	1	.45	2	.84	5	.34	2	.16	1
braking System	0	0	0	0	0	0	0	0	.67	4	.34	2	.16	1
projectiles	15.79	3	8.33	12	3.06	6	1.12	5	1.01	6	.51	3	1.10	7
kinetic energy	15.79	3	6.94	10	1.02	2	.67	3	1.34	8	1.37	8	1.10	7
high temperature	0	0	.70	1	.51	1	2.47	11	.67	4	2.22	13	1.26	8
Possible risks														
flammability	5.26	1	0	0	2.04	4	1.35	6	1.34	8	2.05	12	1.10	7
explosion	0	0	0	0	0	0	.22	1	.34	2	0	0	0	0
electric shock	0	0	4.17	6	0	0	1.35	6	3.70	22	1.20	7	.32	2
ingestion	5.26	1	19.45	28	27.55	54	11.21	50	15.29	91	20.85	122	25.51	162
inhalation	5.26	1	1.39	2	2.04	4	.22	1	1.51	9	1.54	9	1.10	7
contact with skin	5.26	1	.70	1	1.02	2	.22	1	0	0	.17	1	0	0
infection	0	0	0	0	0	0	0	0	.34	2	.34	2	1.73	11
radiation	0	0	1.39	2	0	0	.22	1	.17	1	.34	2	1.26	8
Observation Total		19		144		196		446		595		585		635

In Table 5, which determines the nature of the risk of unsafe toys concerning the *security* of children for the period 2004-10, construction tops the rankings with 664 reports (46.11%), followed by the dimensions of detachable parts with 353 reports (24.51%) and ingestion with 112 reports (7.78%). Unsafe toys may have direct impact on the *health* of preschool children. More specifically, we found that because of toxicity, the composition of commercial toys is primarily responsible for effects on child health with 663 reports (56.19%), followed by ingestion with 396 reports (33.56%) and construction with 38 reports (3.22%). The graphs in Figures 1 and 2 show the relative frequency on child safety and health more clearly. The numbers in each category of risk features refer to the total of reported incidents during the period 2004-10.

Table 5 Frequency of Toy Features Involving Security and Health Risk for Children over three years old (2004-10)

	Relative frequency (%) and number of observations (n)			
	Security risk		Health risk	
Toy features involving risk	%	n	%	n
construction	46.11	664	3.22	38
composition	0	0	56.19	663
fraudulent use of a mark	.69	10	.25	3
unclear instructions	3.68	53	1.02	12
mechanical problems	1.74	25	0	0
dimensions of detachable parts	24.51	353	0	0
loss of buoyancy	0	0	0	0
loss of support	0.76	11	0	0
braking System	.49	7	0	0
projectiles	2.92	42	0	0
kinetic energy	2.85	41	0	0
high temperature	2.64	38	0	0
Possible risks				
flammability	2.64	38	0	0
explosion	.21	3	0	0
electric shock	2.99	43	0	0
ingestion	7.78	112	33.56	396
inhalation	0	0	2.8	33
contact with skin	0	0	.51	6
infection	0	0	1.28	15
radiation	0	0	1.19	14
Total	100	1440	100	1180

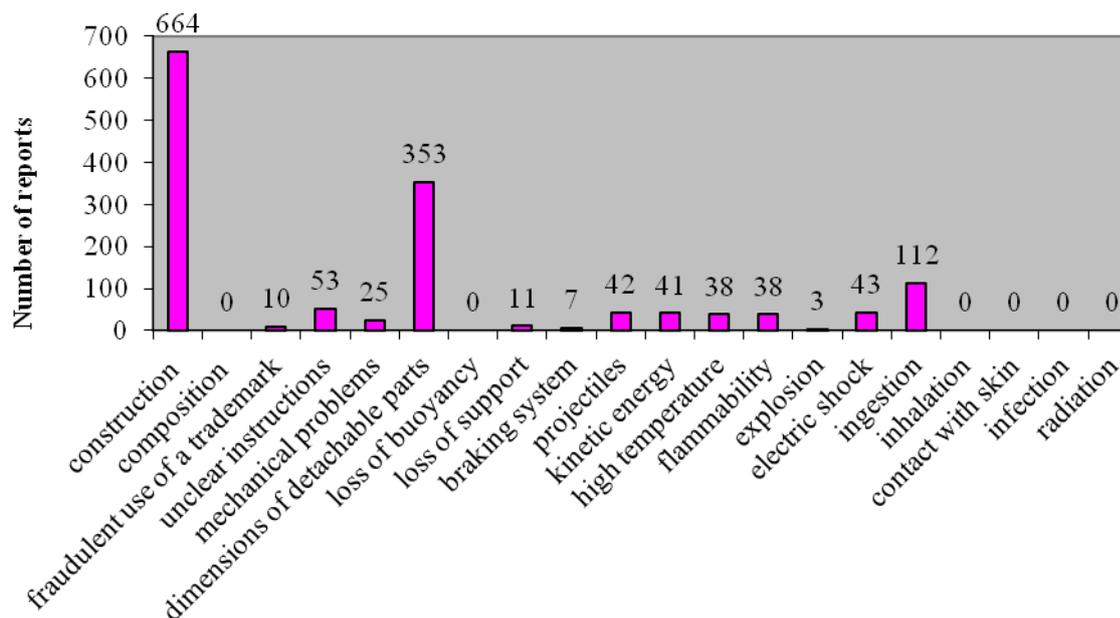


Figure 1 Frequency of Toy Features Involving Security Risk (2004-10)

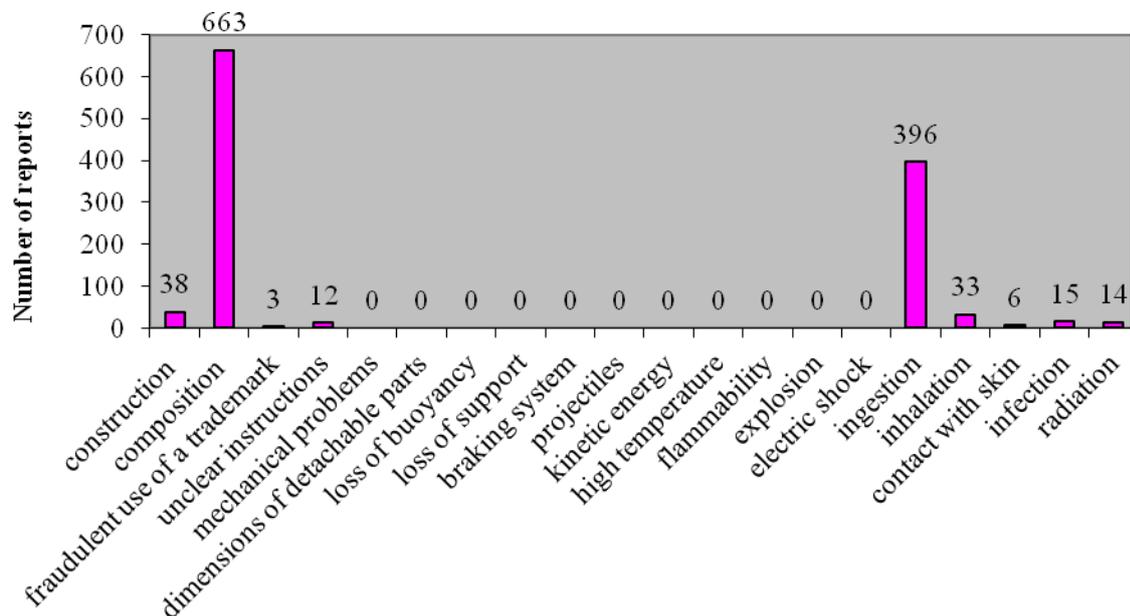


Figure 2 Frequency of Toy Features Involving Health Risk (2004-10)

The final phase of analysis of the research results, which answers our fourth objective, refers to Greece's management of the increased risks caused by unsafe commercial toys by imposing NGK sanctions (see Table 6) on people involved in the manufacture, importation and distribution of toys in the Greek market. In 2004, no fines were imposed owing to the initiation of RAPEX in the Greece (see Figure 3), whereas in 2005 three sanctions were imposed (9.68%). The largest number of penalties was imposed in 2006 (nine

penalties or 29.03%) and in 2007 (10 penalties or 32.25%) in a total of 31 reports. In 2008 there were only two sanctions (6.45%), in 2009 four penalties (12.90%) and in 2010 three penalties (9.68%).

Table 6 Administrative Sanctions from Greece during the Period 2004-10

Variable values (year sanctions)	Number of observations (frequency)	Relative frequency (%)
2004	0	0
2005	3	9.68
2006	9	29.03
2007	10	32.25
2008	2	6.45
2009	4	12.90
2010	3	9.68
Total	31	100

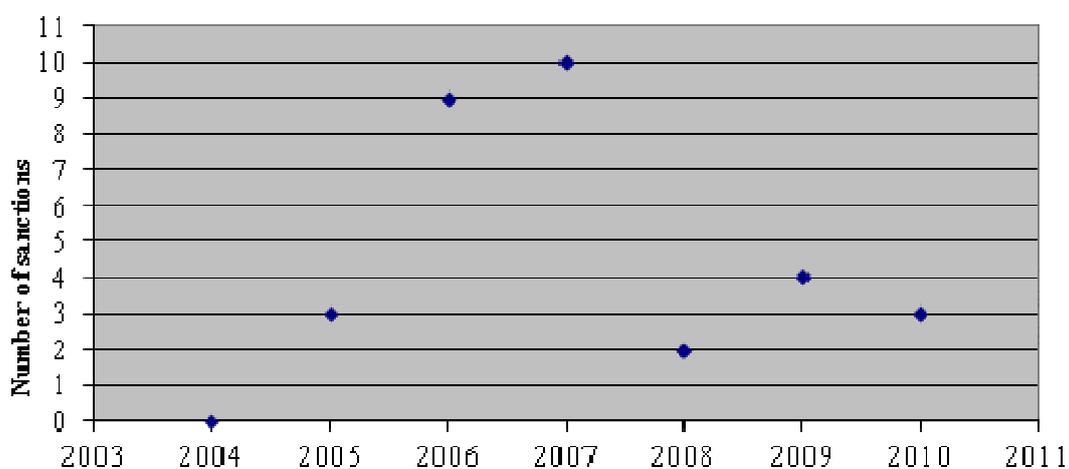


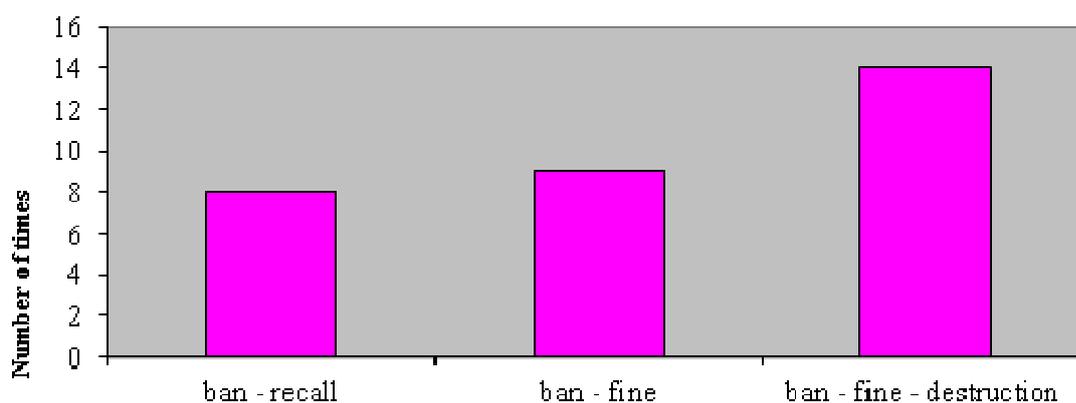
Figure 3 Administrative Sanctions from 2004 to 2010

Of a total of 50 reports of administrative sanctions (see Table 7), construction leads with 13 reports (26%), followed by fraudulent use of a trademark with eight reports (16%) and composition with five reports (10%). Unclear instructions for use, kinetic energy, flammability and ingestion have four reports each (8% each), whereas projectiles and electric shock have two reports each (4% each). Mechanical problems, dimensions of detachable parts, inhalation and radioactivity are in last place with one report each and a rate of only 2%.

Table 7 Frequency of Administrative Sanctions per Unsafe Features of Toys and Possible Risk during the Period 2004-10

Toy features involving risk	Number of observations (frequency)	Relative frequency (%)
construction	13	26
composition	5	10
fraudulent use of a trademark	8	16
unclear instructions	4	8
mechanical problems	1	2
dimensions of detachable parts	1	2
loss of buoyancy	0	0
loss of support	0	0
braking system	0	0
projectiles	2	4
kinetic energy	4	8
high temperature	0	0
Possible risks		
flammability	4	8
explosion	0	0
electric shock	2	4
ingestion	4	8
inhalation	1	2
contact with skin	0	0
infection	0	0
radiation	1	2
Total	50	100

Finally, regarding the 31 sanctions imposed so far for unsafe toys, Greece has requested (see Figure 4) a ban on sale plus a fine and destruction 14 times (45.16%), a ban on sale plus a fine (29.03%) nine times and a ban and recall of the product eight times (25.81%).

**Figure 4** Administrative Sanctions

Conclusions

As demonstrated by the content analysis of Directive 88/378/EEC, Law 2251/1994, Directive 2001/95/EC, JMD Z3/2810/2004, RAPEX notifications and administrative sanctions, only in Directive 88/378/EEC do we observe explicit legislation to protect children from unsafe commercial toys. More specifically, in terms of the requirements of a safe commercial toy, as defined by Directive 88/378/EEC in conjunction with RAPEX notifications, the most common *safety* risk for the child user is the poor or faulty *construction* of the commercial toy, which may cause injury to his/her hearing or sight. Some RAPEX notifications refer to adult injuries, as during play with a child, a toy part penetrated the eye.¹⁸ In other cases parents reported that their own intervention prevented the strangulation of a child owing to faulty toy construction.

A second common risk is *detachable toy parts*. A closer look at RAPEX reports is enough to confirm that many accidents from detachable toy parts have occurred and other incidents have been prevented owing to the intervention of adults. Detachable toy parts, depending on their size, may suffocate or drown the unsuspecting child.

The third common risk to children's safety is *ingestion*, meaning that they can swallow small-sized parts or objects that are part of the toy.

One of the biggest risks to children's *health* is related to the *composition* of the toy. Incorrect toy composition can create problems in terms of inhalation of toxic substances and a risk of electric shock in the case of electrical toys where voltage exceeds the predetermined limits set by the toy safety requirements. The toxicity that some toys present with excessive or incorrect use of chemicals in their manufacture can be particularly dangerous. It is noteworthy that in 2005 some commercial toys for preschool children were reported to emit radiation.

Not only can the composition of a toy have fatal effects when used by a child, but an excess of kinetic energy and projectiles are also potentially dangerous. Moreover, commercial toys should bear clear instructions for use, so that they are easy and safe to use during the playing process. There are toys, however, that have the CE conformity mark without complying with the validity requirements, thus deceiving users. Also, since many toys are motorised, mechanical problems are another risk to the child user. Moreover, some manufacturers exhibit criminal negligence in the production of some toys which are flammable or hazardous to children; in some cases, contact with the toy can cause dermatitis or allergies. Risks arising from the loss of buoyancy, poor braking systems, explosion or infection had not been reported in RAPEX notifications at the time of this research.

At this point the role of the state should be noted in terms of its imposition of sanctions on violators. It is not surprising that the percentage of sanctions imposed by Greece in the early years of RAPEX increased significantly. Risks like construction and fraudulent use of trademarks are at the top of the list of penalties.

Proposals

Protecting children from unsafe toys is a new field for the EU and Member States. Essentially, the EU began to be concerned in the late 1980s, and its interest peaked in the early twenty-first century when emphasis on consumer protection was given with the implementation of RAPEX for all Member States. RAPEX reveals the excessive number of hazardous commercial toys threatening the safety and health of preschool children, although the enforcement of sanctions on offenders is somewhat reassuring.

Given the great significance of commercial toys in the preschool curriculum, the scale of improper commercial toys, according to RAPEX notifications is daunting. The difficulty is

that the RAPEX notifications do not reach those directly interested, i.e. parents, teachers, toy librarians and practitioners in childcare settings who are involved in the selection and use of appropriate toys for children. Therefore the Greek Ministry of Education should, as soon as it becomes aware of a RAPEX notification concerning an unsafe toy, forward it to all schools and responsible administrative staff, attaching, in addition to any comments, a photograph of the banned toy to avoid any confusion.

It should also be noted that kindergarten teachers must pay particular attention to and be urgently informed of previous RAPEX reports and destroy any unsafe toys still to be found in their kindergarten. Special training programmes on toy safety for adults and children could be organised. Moreover, the introduction of information technology in the curriculum and the free installation of computers in Greek kindergartens would give teachers the ability to directly access RAPEX via the internet.

The relevant ministries should jointly issue an information leaflet addressed to parents¹⁹, or promote a television campaign on conditions and requirements of safe commercial toys to accompany toy advertisements.

Administrative sanctions today consist of a ban on the sale of unsafe commercial toys, destruction and fines on manufacturers as an initial measure against their lack of awareness. Those offences which are currently considered as civil and administrative should be treated as criminal by the addition of a relevant article in the Criminal Code, so they are regarded as misdemeanours and punished by a term of imprisonment. Issues related to child safety, protection and public health are of major importance, and both Greece and the EU must show appropriate concern.

Endnotes

¹ The first toy company that used TV advertisements to promote products aimed at children rather than parents, and with great success, was Mattel (Cross, 1997, p. 164; Kline & Pentecost, 1990, p. 241).

² Statistics on toy sales, compiled by the International Council of Toy Industries, are available at http://www.toy-icti.org/publications/wtf&&f_2001.

³ MD Γ2/5051ε, Article 4, which was replaced by MD 21072A/Γ2 and 21072β/Γ2.

⁴ For toy safety standards around the world visit <http://www.toy-icti.org/info/toysafetystandards.html>.

⁵ See <http://www.eurofound.europa.eu/areas/industrialrelations/dictionary/definitions/communitycharterofthefundamentalsocialrightsofworkers.htm>

⁶ Posted on 14 October 1991 in the *EU Official Journal*, 267, 165, entitled RESOLUTION on human rights in the world for the years 1989 and 1990 and Community human rights policy.

⁷ See <http://www.efpolis.gr/el/library2.html?func=fileinfo&id=190>.

⁸ Council Directive 88/378/EEC of 3 May 1988 on the approximation of the laws of the Member States concerning the safety of toys. For more information visit: <http://ec.europa.eu/enterprise/policies/european-standards/documents/harmonised-standards-legislation/list-references/toys> and <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1988L0378:20101201:EN:PDF>

⁹ See <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:170:0001:0037:en:PDF>

¹⁰ For guidance documents from the Expert Group on Toy Safety visit <http://ec.europa.eu/enterprise/sectors/toys/documents/guidance>

¹¹ The General Secretariat for Consumer Affairs belongs to the Ministry of Labor and Social Security (<http://www.efpolis.gr>).

- ¹² The European standard EN 71 specifies safety requirements for toys. Compliance with the standard is legally required for all toys sold in the EU.
- ¹³ The website of RAPEX <http://www.efpolis.gr/el/rapex.html> in Greece and the European Union http://ec.europa.eu/consumers/dyna/rapex/rapex_archives_en.cfm.
- ¹⁴ For more information see http://www.anthropos.gr/show_mko.asp?Id=1694.
- ¹⁵ The Consumer Institute (INKA / General Consumers' Federation of Greece) is an independent, non-profit, and non-governmental organisation (<http://www.inka.gr>).
- ¹⁶ For more information see <http://www.efpolis.gr>.
- ¹⁷ The first column lists the price variable (Xi), the second column is sorted according to the RAPEX notifications and records the number of observations (Vi), which shows how many times this value occurs in the sample, and finally, the third column shows the relative frequency (fi%).
- ¹⁸ In the 11th week of 2007 there is a reference from France in RAPEX 272/07. It was a toy helicopter with a tail broken off.
- ¹⁹ See the EU leaflet 'Toys: Safety Tips' at http://ec.europa.eu/enterprise/sectors/toys/files/toys-safety-tips/toy_safety_tips_en.pdf

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