

**Assessment of Children's Clothing: An Empirical Study of the
Toxic Chemicals, Clothes Safety and Health Benefits to
Children Aged 0 To 5 Years in Akwa Ibom State**

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ABSTRACT

The study sought to assess children's clothing. Clothing is one of the basic needs of human life. Clothing provides a proper way to cover the body and has numerous additional uses. Children's clothing is an important as well as famous arm of the current clothing industry under various categories. It has a significant impact on children's health, safety, and well-being. These outcomes can be affected not only by the type of clothes that children wear, but also by many other factors related to the child, caregiver, and environment. Different components and elements of clothing can have different impacts on children. Accessories in clothing, such as cords, drawstrings, belts, ties, and buttons on garments, can act as safety hazards for children. Safety and comfort are considered top priorities when selecting fabrics for manufacturing children's apparel. In addition to that, kids like to play, and the nature of children's activities means that their clothes should be durable, suitable, and flexible for lively little lives, as well as easily machine washable, as they will likely need to be cleaned frequently. The act of putting on and taking off costumes or outfits also has physical benefits for children. It helps kids practice language development and their social skills. Recommendations were made in the study, one of which was that parents should avoid buying baby clothes that are made from synthetic fabrics and chemical dyes to ensure their children's health safety.

KEYWORDS: Children's Clothing, Toxic Chemicals, Safety, and Health Benefits

Introduction

Clothes protect our bodies from various climates and give us a good appearance. Children's or kids' clothing is often more casual than adult clothing. The basic requirements for kid's wear are that they be fit for play, comfort, and rest. In this vigorous world, children are given more care and attention in the selection of their garments. The designers need more concentration on simplicity, comfort, and new looks in designing children's garments. Safety and comfort are considered top priorities when selecting fabrics for manufacturing children's apparel. The delicate skin of children reacts to certain fabrics, which makes them less comfortable to wear (Dogbey, 2015). The selection of fabrics for children's apparel should be done very carefully as the skin

of children is usually very sensitive and can get affected by allergies easily (Forsberg and Mansdorf, 2007). In addition to that, kids like to play, and the nature of children's activities means that their clothes should be durable, suitable, and flexible for lively little lives, as well as easily machine washable as they will likely need to be cleaned frequently (Kostelnik, 2009).

The selection of appropriate clothing for children is critical to their enjoyment of health (Morrow 2004). The cloth should not irritate the delicate skin of the child's body (2008). While selecting children's clothing, there are a few things needed to be aware of in order to keep children safe and comfortable. So, the construction of the children's wear should be simple and comfortable. Also, designers, as the makers of clothes, often strive to balance a garment through fabrics by creating or negotiating forms that look good and make children feel good too. Clothing, like other forms of sociality, defines and shapes us as humans and our actions and movements through time and space as material objects, as well as communicates our individual identities. They play a significant role in our lives (Rippin, 2012; Prain, 2014), and historically, different fabrics and textiles have carried different statuses in different contexts (Baugh, 2011; Rippin, 2012). Customers and parents are immensely conscious about their children's clothes while buying. Safety and comfort are considered top priorities for children's clothing. Because the delicate skin of children reacts to certain fabrics, making them less comfortable to wear. Several mechanisms of injury are impacted by clothing, such as choking, swallowing, strangulation, entrapment, entanglement, burns, skin allergies, cut injuries, contusions, entrapments, tripping over, falls that can lead to disability or even death. Also, it was discovered that most children's movements were hampered, and action should be encouraged to secure the safety of the children. Discomfort dresses may make them annoying and different from others. Arguably, it is commonly said that children should feel comfortable, be allowed to play, get dirty and move around in their clothes. Simultaneously, children are in a vulnerable position in relation to adults. After all, it is adults that design and produce clothes for children that later become associated with fashion.

Concept of Clothing

Clothing is an item of clothing or fabric, usually sewn together to cover part of the human body. Humans are the only animals that wear clothing, and all people do wear suitable clothing. Clothing serves many purposes: it can serve as protection from the elements, rough surfaces, sharp stones, rash-causing plants, insect bites, splinters, thorns, and prickles by providing a barrier between the skin and the environment. Clothing can insulate against cold or hot conditions, and it can provide a hygienic barrier, keeping infectious and toxic materials away from the body. It can protect feet from injury and discomfort or facilitate navigation in varied environments. According to Hallett (2021) and Davis (2021), scientists reported evidence of clothes being made 120,000 years ago. Clothing also provides protection from ultraviolet radiation. It may be used to prevent glare or increase visual acuity in harsh environments, such as brimmed hats. Clothing is used for protection against injury in specific tasks and occupations, sports, and warfare. Fashioned with pockets, belts, or loops, clothing may provide a means to carry things while freeing the hands. However, despite these indications, there is no single estimate that is widely accepted (Toups, 2011). A second group of researchers using similar genetic methods estimates that clothing originated between 114,000 and 30,000 years ago (Reed et al. 2004).

Clothing (also known as clothes, apparel, or attire) is worn on the body. Typically, clothing is made of fabrics or textiles, but over time it has included garments made from animal skin and other thin sheets of materials and natural products found in the environment, put together. The wearing of clothing is mostly restricted to human beings and is a feature of all human societies. The amount and type of clothing worn depends on gender, body type, social factors, and geographic considerations. Garments cover the body; footwear covers the feet, gloves cover the hands, and hats and headgear cover the head. Eyewear and jewelry are not generally considered items of clothing but play an important role in fashion and clothing as a costume. Song (2011) noted that comfort is related to various perceptions, physiological, social, and psychological needs, and that, after food, it is clothing that satisfies these comfort needs. Clothing provides aesthetic, tactile, thermal, moisture, and pressure comfort.

Clothing is also worn for decoration, as a fashion statement. People from different cultures wear different clothing and have different beliefs and customs about what type of clothing should be worn. For many people, clothing is a status symbol. It helps people project an image. Often, clothing is a form of self-expression. Adults in different social or work situations present different views of themselves through the clothes they wear. Young people have an entirely different form of dress to express their personalities. Often, people will simply follow popular fashion styles so that they will fit in. Clothing is far more than just a means to protect our bodies. Clothing has been made from a very wide variety of materials, ranging from leather and furs to woven fabrics to elaborate and exotic natural and synthetic fabrics. Not all body coverings are regarded as clothing. Articles that are carried rather than worn normally are considered accessories rather than clothing (such as handbags), items worn on a single part of the body and easily removed (scarves), items worn purely for adornment (jewelry), or items that do not serve a protective function. For instance, corrective eyeglasses, Arctic goggles, and sunglasses would not be considered accessories because of their protective functions. Apparently, Baradel (2014) postulated that anyone who lacks the means to procure reasonable clothing due to poverty, affordability, or simply lack of inclination, is sometimes said to be scruffy, ragged, or shabby.

Concept of Children's Clothing

Children's clothing, or kids' clothing, is clothing for children who have not yet grown to their full height. Children's clothing is often more casual than adult clothing, and is fit for play and rest. Leisure wear and sportswear are two very prominent design styles in children's clothing. Girls' clothing is available in a wide range of styles. More recently, gender-specific children's clothing has become a contentious issue. According to some feminist thinkers, children's clothing has become increasingly segregated, with young girls especially being expected to wear pink. Also, according to Historian Paoletti (2012), pink and blue only became associated with girls and boys, respectively, from the 1940s onwards. Before the early twentieth century, clothing worn by infants and young children shared a distinctive common feature: their clothing lacked sex distinction. The origins of this aspect of children's clothing stem from the sixteenth century, when European men and older boys began wearing doublets paired with breeches. Function and design must meet in the right proportions in children's clothes for them to be popular and accepted. Fabric choices, openings and fastenings, fit and ease, trimmings used, are all major considerations when designing children's wear. Some other factors a

designer designing for children's clothing should focus on are the changing shape of the growing kid and different proportions of the different parts of the body.

Appropriate Clothes for Young Children

Dress young children according to activities and the temperature of their surroundings. Choose fabrics based on the temperature—cotton for hot weather and synthetics for cold weather. The major activities to consider include:

Sleeping — A baby requires clothing or covering like an adult does. Knitted gowns with mittens on the sleeves are a good choice for infants. For little ones 6 months or older, select pajamas with feet. These will help keep the child warm even when blankets are kicked off during the night. All children's sleepwear is flame retardant, but it must be laundered correctly to maintain this quality. Follow the care instructions carefully.

Eating — Small round bibs will absorb drooling and excess liquids from bottles or breast feeding. For babies on solid foods, a large bib of plastic or a combination of cloth backed with plastic will be useful. Pockets across the bottom of the bib to catch food will be helpful, and cloth binding at the neck will add comfort for the child.

Playing — For indoor play, choose stretch play suits, diaper-shirt sets, and gowns for small babies. Toddlers will enjoy coveralls, overalls, T-shirts, etc. For playing outdoors, toddlers will need shorts, tops, and overalls or shortalls for summer, and coveralls, corduroy pants, and sweaters (front openings) for winter.

Dress Up — Most adults like to "show off" their babies. They usually try to dress the young child to look especially "pretty." Select garments for such occasions carefully. Avoid scratchy laces, stiff fabric, etc. Fancy, ruffled plastic pants, "cute" shoes, and caps may be uncomfortable for small children. Select garments of soft fabric similar to the everyday garments the child enjoys wearing. Remember that dressing up will not change the child's behavior or habits—be sure all dress-up clothes are easy to care for and comfortable to wear.

Benefits of Children's Clothing

Children will need to wear clothing that they can manage themselves. This will support their growing independence in using their self-help skills and ensure they can play unimpeded indoors and outdoors. Children's clothing encourages creative thinking and communication skills. It also helps kids practice language development and their social skills. The act of putting on and taking off costumes or outfits also has physical benefits. The buttons, zippers, and snaps on clothing encourage the development of fine motor skills. According to Kimberly (2020), children are stretching their imaginations through different identities and occupations in dress-up and practicing their gross and fine motor skills. Today, children have become a section of the customer base for the clothing industry. One advantage the industry has is that parents are constantly buying clothes for their kids. There isn't much high-quality children's clothing. There are exceptions, but many are not made to last so they can get price points low. The frequency of purchase is higher because kids outgrow their clothes so quickly, but the market size of children's clothing is much smaller than adult apparel.

Concept of Toxic Chemicals

A toxin is a harmful substance produced within living cells or organisms. A toxic substance is a substance that can be poisonous or cause health effects. According to Ernest (2011), toxicants can be found in the air, soil, water, or food. Breland et al. (2018) reported that cigarette smoke contains toxicants. E-cigarette aerosol also contains toxicants (Perikleous et al., 2017).

5 Toxic Chemicals That Could Be in Your Home

Bisphenol A (BPA): BPA is an additive primarily found in plastics that makes the material flexible. Before 2009, BPA was used to make baby bottles and children's drinking cups, until it was found to be toxic. If you have plastic material for children's use that predates 2009, throw it out. BPA is an endocrine disruptor that mimics natural hormones and can affect reproductive health and development. Today, it can still be found in the lining of food and beverage cans, bottled formula, and shopping receipts.

Perchlorate: Perchlorate is an industrial chemical contaminant used in fireworks, bleach, and some fertilizers. It was reported to be toxic in 2005. This chemical affects the thyroid gland and disrupts hormone production needed for growth and development.

Tetrachloroethylene (perchloroethylene) or Perc: This chemical is found in dry-cleaning solutions, spot removers, carpet cleaners, and upholstery cleaners and was reported to be cancerous in 1988. This chemical was banned from new dry-cleaning machines in 2007. The use of such machines will be discontinued by 2023.

2-Butoxyethanol: In California, this chemical is considered toxic to reproductive health and development. Found most often in window, kitchen, and multipurpose cleaners, the chemical is characterized by its sweet smell. According to the EPA, 2-butoxyethanol causes sore throats, narcosis, pulmonary edema, and severe liver and kidney damage. Unfortunately, laws do not yet require 2-butoxyethanol to be listed on a product's label. A safer option would be to make your own natural glass cleaner from vinegar and rubbing alcohol.

Formaldehyde: Formaldehyde was listed as a carcinogen in California in 1988. This embalming fluid is also used as a preservative in many household products, such as glues and adhesives, cleaning and beauty products, baby wipes, and medium-density fiberboards.

Concept of Clothes Safety

Safety clothing is important in the workplace as it protects users against any health and safety risks at work. Also called PPE (Personal Protective Equipment), it lessens the likelihood of injury, illness, and legal issues and ensures a safe, happy working environment for all. The importance of safety clothing cannot be stressed enough. With most industries these days having a strong focus on health and safety, being geared up for the job fulfils your duty as an employer and ensures your workforce stays protected and free from injury. There are many varieties of protective clothing available for specific hazards. Examples of body/skin protection include laboratory coats, coveralls, vests, jackets, aprons, surgical gowns, and full body suits. Every workplace has hazards ranging from the possibility of a fire or explosion to being scratched or scraped by

rough or jagged materials. Luckily, there is protective clothing designed to protect you from the hazards you can encounter on the job. But protective clothing doesn't eliminate a hazard; it protects you from the hazard if you:

- Select the right clothing for the hazard
- Make sure the clothing fits properly
- Wear the clothing when you might be exposed to the hazard
- Maintain the clothing so that it can do its job.

Health Benefits to Children Clothing

Clothing is an important part of our everyday lives. It keeps us warm and protects us from the weather. It may seem surprising, but clothing can also be dangerous for children in Alberta (2021). Dressing up children is not as simple as it seems. Parents and guardians have quite a number of considerations when they shop for clothes for their beloved babies. When poorly designed, children's clothing can present actual risks to kids who are young and oblivious to their surroundings. To help protect your child from getting hurt by clothing, make sure that you or an adult you trust is watching over your child. Dress your child in the right clothing for every activity they're doing.

The recognised hazards that parents and guardians alike should be aware of are the following:

Small Parts

Any object that can easily be swallowed by a child is considered hazardous because it can cause choking. Certain components of kids' clothing can be accidentally detached, such as rivets, buttons, zippers, hooks, bows, and other decorative labels. Some are even more dangerous due to their sharp edges that can lacerate a child's oesophagus when accidentally swallowed.

Drawstrings

These are cords and ties that are long enough to cause accidents when they get caught on doors, handrails, or even moving vehicles. Drawstrings at the hood are considered the most hazardous as they can cause strangulation. Hence, when buying a gift set of baby products, always double-check the measurement of the drawstrings. For kids, cords and ties should measure no more than three inches. They should also have bartacks instead of just knots and be sewn seamlessly to avoid the possibility of the fabric being ripped apart, thus exposing the drawstring.

Toxic Substances

Fancy and cute children's clothes are one of the most in-demand items in the kids' fashion industry. If you are a mum, you will know that on some days, your kid turns into a fashionista who insists on pairing two items that absolutely do not complement each other. Even kids enjoy dressing up and have an idea of what looks amazing on them! Many kids' clothes have sparkly embellishments and colours that contain chemicals. Phthalates and lead found in plastics and coloured paint are the most common hazards that are associated with children's clothing. Both are considered toxic substances that can damage organs with prolonged exposure.

Flammable Fabrics

This usually occurs with sleepwear that is designed to be light, soft, and comfy for kids. It includes nightgowns, pyjamas, robes, onesies, and loungewear. Sleepwear for children is usually flowy and loose and could, in unfortunate circumstances, come into contact with ignition sources such as stoves, candles, matches, and lighters. If the sleepwear was made of cheap materials instead of quality ones, it could rapidly burn and completely turn to ash in under 150 seconds, endangering the lives of these children.

Kids are more vulnerable to these potential risks, and they definitely need closer supervision. Hence, knowing the above safety hazards would help parents and guardians be wiser when shopping for baby apparel. At the end of the day, there is nothing like the peace one feels when they know that they have done everything in their power to reduce the potential risks and harm that their precious children could be exposed to.

Conclusion

Clothing is an important part of our everyday lives. It keeps us warm and protects us from the weather. Dressing up children is not as simple as it seems. Safety and comfort are considered top priorities when selecting fabrics for manufacturing children's apparel. In addition to that, kids like to play, and the nature of children's activities means that their clothes should be durable, suitable, and flexible for lively little lives, as well as easily machine washable, as they will likely need to be cleaned frequently. The act of putting on and taking off costumes or outfits also has physical benefits for children. It helps kids practice language development and their social skills.

Recommendations

1. Parents should avoid buying baby clothes that are made from synthetic fabrics and dyed with chemical agents.
2. The designers need to concentrate more on simplicity, comfort, and new looks in designing children's clothes.
3. The selection of fabrics for children's apparel should be done very carefully as the skin of children is usually very sensitive and can get affected by allergies easily.

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