Safety habits promoted by hispanic parents for school-aged and adolescent children

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FLORIDA INTERNATIONAL UNIVERSITY

Miami, Florida

SAFETY HABITS PROMOTED BY HISPANIC PARENTS
FOR SCHOOL-AGED AND ADOLESCENT CHILDREN

A thesis submitted in partial satisfaction of the
requirements for the degree of
MASTER OF SCIENCE
IN
NURSING

by

Mary Ellen Ernst

1998
To: Dean DeLois P. Weekes  
College of Health Sciences

This thesis, written by Mary Ellen Ernst, and entitled Safety Habits Promoted by Hispanic Parents for School-aged and Adolescent Children, having been approved in respect to style and intellectual content, is referred to you for judgement.

We have read this thesis and recommend that it be approved.

Dr. Suzanne Phillips

Dr. Ruth Dailey Grainger

Dr. Sandra L. Lobar, Major Professor


The thesis of Mary Ellen Ernst is approved.

Dean DeLois P. Weekes  
College of Health Sciences

Dr. Richard L. Campbell  
Dean of Graduate Studies

Florida International University. 1998
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ABSTRACT OF THE THESIS
SAFETY HABITS PROMOTED BY HISPANIC PARENTS
FOR SCHOOL-AGED AND ADOLESCENT CHILDREN
by
Mary Ellen Ernst
Florida International University, 1998
Miami, Florida
Dr. Sandra L. Lobar, Major Professor

Accidents are the leading cause of death among children. Compliance with safety measures have been shown to reduce morbidity and mortality in children. However, Hispanic parents and children have not been adequately studied in the literature in regard to trauma and safety habits utilized. In this exploratory-descriptive study, a convenience sample of 48 Hispanic parents were questioned about their child's activities. The purpose was to determine what safety equipment was used during these activities and how often they were used. Responses to an English/Spanish questionnaire were summarized by frequencies and percentages. Findings suggested that these Hispanic children were at risk for injury due to a low percentage of children wearing the necessary protective equipment. Therefore, education must stress consistent use of safety equipment if injuries are to be prevented.
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Chapter I
Introduction

Accidents are the leading cause of death among children in the United States today. In 1994, one of every two childhood deaths was the result of an accident (Mayer & Biester, 1995). Many factors determine the type of accident that may occur. These factors include the age of the child, race, sex, geographic location, socioeconomic status, and culture (Agran, Winn, Anderson, & Del Valle, 1996; Crawley, 1996; Eichelberger, Gotschall, Feely, Harstad, & Bowman, 1990; Gielen, Wilson, Faden, Wissow, & Harvilchuck, 1995; King, Nichols, Hardwick, & Palmisano, 1994; Puranik, Long, Dove, & Coffman, 1996). Another factor which may also determine the seriousness of the injury is whether safety equipment was being worn at the time of the accident. Therefore, the safety habits of children and adolescents is an important factor to consider in relation to accident or injury prevention.

Background of the Problem

The best way to decrease accidents is through educating parents and children on preventive safety measures. Safety awareness and compliance with safety measures have been shown to reduce morbidity and mortality in children (Boswell, Boyd, Schaffner, Williams, & Frantz, 1996). In many instances safety measures implemented by parents, such as providing children with bicycle helmets, seat belts, or life preservers, are the most effective means for interrupting the accident-injury process (Wortel, de Geus, Kok, & van Woerkum, 1994).

Few studies have examined the number of parents utilizing specific safety measures. Assessing what safety measures are and are not implemented in a representative population allows one to effectively formulate the appropriate safety education required by that group. More studies which describe the safety measures, or safety habits, adopted by parents and children are needed in order to identify the safety
habits that are currently being utilized and those that are not being utilized (Wortel et al., 1994). This will ensure that educational efforts are directed where they are most needed.

Race and culture are salient factors in determining what type of accidents may occur in a given population. In Miami, the population is unique compared to most other large cities. Hispanics make up 62.5% of Miami's population (Dade County Planning Department, 1990). The term "Hispanic" refers to an individual who resides in the United States (U.S.) and was born in or can trace the background of his/her family to one of the Spanish-speaking Latin American nations or to Spain. The term is an ethnic label and does not denote race, as Hispanics belong to all racial groups (Marin & Marin, 1991).

Hispanics represent a vast and diverse group of individuals and cultures. Specifying Hispanics by ancestry is considered to be the best characteristic to identify different groups in a sample (Marin & Marin, 1991). According to the Dade County Census of 1990, of which Miami is a part, Cuban Americans numbered 563,979, or 59% of the Hispanic population in Dade County. Nicaraguans followed, making up 7.8% of Dade's Hispanics, Puerto Ricans 7.6%, Colombians 5.6%, and Mexicans were eighth on the list making up only 2.4% of Dade's Hispanic population (Dade County Planning Department, 1990). These numbers have certainly increased since the 1990 census.

Research has been conducted on Hispanics and accidents, however, most of the research was done in California or Texas where the majority of Hispanics are Mexican. Due to the great differences between and among Hispanic groups, it is impossible to generalize from one group to another. These studies, therefore, can only be generalized to the Mexican population, which may differ dramatically from the overall Hispanic population in Miami.

In general, there are very little data on Hispanics as an ethnic group (Carrasquillo, 1991). It is known however, that in 1992, the leading cause of death among Hispanic children from one to fourteen years of age was accidents (Gardner, Rosenberg, & Wilson,
1996). In particular, Hispanics have not been adequately studied in the literature in regard to trauma and safety habits utilized by this group. Only two studies were found in which Hispanics were directly compared to non-Hispanic White children in regard to incidence and types of traumas that occur (Agran, Winn, Anderson, & Del Valle, 1996; Matteucci, Holbrook, Hoyt, & Molgaard, 1995). No studies were found to describe what safety measures Hispanic parents might implement to protect their children from accidents, yet there are studies available on other groups (Eichelberger, Gotschall, Feely, Harstad, & Bowman, 1990; Gielen, Wilson, Faden, Wissow, & Harvilchuck, 1995; Russell & Champion, 1996). More information is needed in the literature on Hispanics and their safety habits if preventive safety education is to be implemented effectively for this population.

Research Purpose

The purpose of this research is to identify the safety habits promoted by Hispanic parents for their school-aged and adolescent children. The frequency with which Hispanic school-aged and adolescent children utilize safety equipment, as reported by their parents, will also be identified.

Research Questions

1. What are the safety habits promoted by Hispanic parents for their school-aged and adolescent children?

2. What percentage of the time do Hispanic school-aged and adolescent children utilize safety equipment?

Definition of Terms

Safety habits Behavior patterns fixed by repetition, which are performed for the purpose of keeping oneself free from danger, risk, or injury (McGraw-Hill Nursing Dictionary, 1979; American Heritage Dictionary, 1991).
Promoted: To encourage the use of.

Hispanic parents: Biological Mother or Father, residing in the U.S., who is a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race (Marin & Marin, 1991).

School-aged: The segment of the lifespan that extends from 6 years to approximately age 12 (Curley, Smith, & Moloney-Harmon, 1996).

Adolescent: The segment of the lifespan from approximately 13 years to about 19 years of age (Curley, Smith, & Moloney-Harmon, 1996).


Significance of the Study and Nursing Implications

This study will add to the sparse information available in the literature on Hispanic parental beliefs about safety and safety habits. It will also describe important demographics and specific information about the safety habits of Hispanic children and adolescents in the Miami area.

Information related to the safety habits promoted by Hispanic parents may be useful to nurses and nurse educators working with the Hispanic population. Results could be useful to practitioners in assessing the types of trauma for which their clients are at risk. It may also give nurses an idea of Hispanic parents' perceptions of risk and what type of "prevention" they feel is necessary in regard to their children's activities. This information could provide the impetus to educate Hispanic parents about particular safety issues that are overlooked by health care providers who interact with this population of clients. This research can lead to further investigation of the practices and needs of other populations of Hispanics so that effective preventive education can be implemented, and further progress can be made in decreasing trauma rates for Hispanic children.
Chapter II

Literature Review

Research results on the etiology, incidence, variables, parental perceptions, and prevention of pediatric accidents are reported in the literature, with Hispanics being the focus of few studies on pediatric accidents and safety. In the following literature review findings of studies on pediatric accidents, safety, and Hispanics will be reviewed.

Pediatric Accidents

Children experience accidents in a variety of ways. Waller, Baker, and Szocka (1989) examined fatal childhood injuries over a six year period from 1980-1985, which included 59,711 pediatric deaths. They analyzed the age, sex, race, and state of residence of all children from 0-14 years of age killed in accidents in the United States. This information was obtained from the National Center for Health Statistics (NCHS) and was analyzed in accordance with the expected death rates for injuries for each state. The authors found that the five leading causes of death were motor vehicle occupant, drowning, pedestrian, house fire, and homicide in some varying order for each age, sex, and racial group. The two exceptions were that suffocation and aspiration replaced drowning and pedestrian deaths for children under one year, and bicycle accidents replaced house fires in children aged 10-14. Coding differences among states in regard to type of injury incurred was one limitation to the study stated by the authors. Other limitations included the fact that Hispanics were not included as a group in the demographics, therefore limiting the findings about accidents in relation to this particular population. The authors stated that "differences observed among racial groups indicate the need for prevention efforts focused on the particular injury problems of certain subpopulations" (Waller, Baker, & Szocka, 1989, p.314).

In a retrospective study done by Boswell, Boyd, Schaffner, Williams, and Frantz (1996), results were similar to Waller et al.'s. Pediatric trauma deaths over a five year
period occurring at two trauma hospitals in Georgia were analyzed. The three leading causes of accidents included motor vehicle occupants, pedestrian versus vehicle, and bicycle versus vehicle. In 81% of the motor vehicle deaths, the victims were unrestrained. In all of the bicycle deaths, no protective headgear was worn. Twelve of the nonvehicular deaths in this study were deemed "potentially preventable" if adequate parental supervision had been provided. The authors stated that "to protect children from serious injury and death from vehicular and other accidents, safety awareness and compliance with safety measures should be promoted" (Boswell, Boyd, Schaffner, Williams, & Frantz, 1996, p. 220). A limitation of this study was the population size and the lack of demographic information provided, such as race and socioeconomic status. Groups at higher risk for such injuries could have been more easily recognized had this information been available.

Martin, Langley, and Coffman (1995) studied trauma victims at Broward General Medical Center, in Fort Lauderdale, Florida. They found that the leading causes of injury to children 14 years of age and younger were pedestrian versus automobile, falls, motor vehicle occupants, and bicycle versus automobile. Most traumas occurred during the afternoon hours, when most children would be heading home from school. It was determined that 62% of the victims were unrestrained in their vehicles, and that none of the bicycle victims wore helmets. The findings of this study, and others like it, have many implications for preventing pediatric accidents. Results demonstrate that the types of accidents among children occur consistently and in predictable patterns in regard to demographic information, such as age, sex, and race (Crawley, 1996). More importantly, these studies emphasize the fact that many fatal outcomes resulting from accidents could have been avoided had some type of preventive safety equipment been worn (Boswell et al., 1996; Martin et al., 1995).
Eichelberger, Gotschall, Feely, Harstad, and Bowman (1990) conducted a national telephone survey regarding parents' understanding of childhood injury risks and control, and parental attitudes toward childhood safety programs. They concluded that parents had a poor understanding of many childhood safety issues. Except for the risk of injury from motor vehicle accidents, most parents tended to underestimate the risks for other types of injuries. Most parents felt that they could protect their child from injury through caution and vigilance. It was also found that most parents preferred to obtain information regarding child safety through a physician or hospital. Some limitations of the study were the exclusion of households without telephones and the exclusion of those families who did not speak English. This could lead to an underrepresentation of Hispanics, Asians, and other non-English speaking households, as well those of low socioeconomic status. The implications are that many parents need to be made more aware of safety issues that may realistically affect their child.

Glik, Kronenfeld, and Jackson (1991) telephone surveyed 1,200 households who had preschool children. The authors wanted to assess the relationship between the parents' perceived risk of childhood injuries and several variables. The Health Belief Model was used as the theoretical framework for this study. The authors found that parents who experienced a previous injury to a child were more likely to score higher on the perceived risk items. Thus, direct experience with injuries increased parental awareness of risk. It was also found that parents tended to underestimate the risk of more serious injuries to their child such as burns, head injuries, and broken bones. Findings of this study showed that variations in risk perceptions are linked more to situational factors, such as a difficult or more active child, than sociodemographic characteristics of the parents, such as a lower education or income level. From this study the authors concluded that it is imperative to assess how parents perceive their child's level of injury risk, as this
was seen as an important element in whether or not risk management was implemented by the parents for their child. A limitation of this study would be that the sample population consisted of a majority of Caucasians with moderate incomes. Only female caretakers were interviewed.

Peterson, Farmer, and Kashani (1990) also utilized the Health Belief Model as the theoretical framework for their study. Subjects included 210 families with a girl or boy aged either 8, 12, or 17 years. Questionnaires were administered in an attempt to identify a link between attitudes or opinions on the part of parents and preventive behaviors. It was found that most parents felt relatively unworried about injuries and felt that they were unlikely to happen to their child. The most important finding, according to study results, was that more safety teaching efforts were reported by parents when they knew about the safety measure involved, felt competent to intervene, and felt that the intervention would be successful in preventing an injury. One limitation of this study is that the results are based solely on parental report. Another limitation is the lack of generalizability, as 89% of respondents were Caucasian. Implications are that if parental awareness of injury prevention is increased, and if their competence in teaching the safety measure is increased, by a class, or perhaps even an informal discussion with a healthcare worker, then more safety teaching may occur in the home. This could potentially lead to a reduction in accidental injuries among children and adolescents.

In a study by Russell and Champion (1996) 140 women of low socioeconomic status were studied to determine relationships between health beliefs, social influence, and home injury proofing behaviors of mothers for their preschool children. Data were obtained through interviews and observations of the mothers' homes. The authors found that self efficacy was the strongest predictor that a mother would safety proof her home. This implies that parent's perceived personal ability was more predictive of safety behaviors than their perceptions regarding the child's risk of injury, according to the
results of this study. They also found that mothers with a previous injury experience were more likely to have fewer hazards present in their homes. Some limitations of the study were the use of self-reported data and the sampling characteristics. The sample was primarily African-American mothers of low socioeconomic status, thus decreasing the generalizability of the results.

Moss and Tobin (1988) interviewed 81 rural parents with children under four years of age. This nonexperimental exploratory study was designed to assess what perceptions and experiences may be associated with whether parents restrain their child in a car seat or not. The questionnaire, which consisted of five questions related to perceptions and twelve to experiences, took less than ten minutes to complete. A weak relationship was found between parents who believed that putting a child in a car seat would protect him/her from injury and the frequency of car seat use. Thus, even when parents acknowledge that a child would be protected from injury if restrained, the frequency of use did not increase dramatically. The law was found to be an influential factor associated with car seat restraint. However, the strongest association in the study was between the frequency and age of initial use of restraints and the frequency of current restraint. These results suggest "that the habit of restraint is an important factor for both parent and child" (Moss and Tobin, 1988, p.108). This would imply that the more often and consistently the child was restrained starting at an early age, the more likely he and his parents were to engage in this "safety habit" when driving. One limitation of the study is the use of self-report to obtain data.

Miller, Binns, and Christoffel (1996) explored the attitudes of parents and children toward the use of bicycle helmets. They also attempted to assess the impact of parental rules in promoting bicycle helmet use. The convenience sample consisted of 169 children ages 5 to 14 years who owned bicycles, and their parents, who were coming to the pediatrician for well-child visits. Parents were given a three page questionnaire to
complete, while the children were interviewed by researchers. Parent-child interaction was discouraged during the interviews. Results showed that 72% of parents had not purchased a bicycle helmet for their child and only 20% of parents had purchased a helmet for each child. With only 45% of those children reporting that they wear their helmet most or all of the time, the overall use rate for the entire sample of children and parents was 12%. Sixty-four percent of the children stated that they would wear a bicycle helmet if they had one. Thirty percent of the children who reported that they have a helmet and wear it, stated that they did so because their parent makes them. Finally, "more children with a strict rule report using their helmet most or all of the time compared with children with a partial rule or no rule, 88% vs.19%" (Moss and Tobin, 1996, p.1263). Some limitations of the study are that self report was used and that there were some discrepancies between parent and child responses in a few cases. Also the majority of the sample was from suburban pediatric offices, which may not be generalizable to those children who do not receive primary care. The researchers also suggest that the children may have had some difficulties with the open-ended format of questioning.

Hispanic Cultural Implications

Two studies were found that directly compared Hispanics to non-Hispanic White children in regard to childhood injuries. Agran, Winn, Anderson, and Del Valle (1996) established a surveillance system in north central Orange County, California, to identify children under 15 years of age who sustained injuries which resulted in hospitalization or death. The participants were listed as Hispanic if they met any of the three following criteria: (a) classified as Hispanic on hospital admission records; (b) had a Hispanic surname according to a 1980 census listing; or (c) the child or family used Spanish as a primary language. Overall incidence rates of severe injury and cause-specific incidence rates were calculated and compared for Hispanics and non-Hispanic Whites. A total of 1361 hospitalized and fatal injuries were identified. It was found that the age-specific
injury rates were consistently higher for Hispanics than for non-Hispanic Whites. Hispanic children were found to be 1.6 times more likely to be hospitalized for injuries, had a higher incidence of poisonings, and were twice as likely to be involved in pedestrian injuries than non-Hispanic Whites. There are important implications of this study. As the rate of poisonings was high for this population, the authors suggest that labels on poisons and medications be bilingual. They also state that Spanish-language information on occupant protection systems is needed, as well as more culturally and linguistically appropriate education for Hispanic parents. The authors write "differences in rates by ethnicity must be further explored to address specific injury hazards to specific populations to develop appropriate methods of prevention" (Agran et al., 1996, p. 405). One limitation of the study would include the Hispanic classification system used. Children included in the study could have Hispanic surnames without being Hispanic. Eighty-seven percent of Hispanics in this study were of Mexican descent, which may make the results not generalizable to other Hispanic populations. The authors also cite other variables such as lack of a primary care physician, transportation factors, language barriers, and socioeconomic status as factors which may confound and even exaggerate the hospitalization rates for Hispanics.

Matteucci, Holbrook, Hoyt, and Molgaard (1995) conducted a population-based study of trauma in Hispanic children. The goal of the research was to compare the characteristics of traumatic injury in Hispanic children versus non-Hispanic White children. The San Diego County Regionalized Trauma System admitted 1164 injured Hispanic children and 2560 injured non-Hispanic White children from 1985 through 1990, and injury characteristics were compared. Results showed that the incidence rates between Hispanics and non-Hispanic Whites were not significant, although there were variations in the mechanism of injuries between the groups. In regard to the use of protective devices, Hispanic children were 4 times more likely not to have worn seatbelts, 3.7 times more
likely not to have been restrained in the car, and 2.9 times more likely to not have worn bicycle helmets than non-Hispanic White children. Although no reason for this disparity is suggested by the researchers, they state that "preventive programs targeted at these areas in Hispanic children could substantially decrease mortality and morbidity in this population" (Matteucci et al., 1995, p. 1007). One limitation of the study is its lack of generalizability, due in part to the lack of demographic characteristics of the Hispanics included in the study. The authors also point out that the rate of non-use of protective devices are among injured children only, thus no speculation can be made about the rates in the population as a whole.

DeSantis and Thomas (1994) used a descriptive design to study thirty recent Cuban and Haitian immigrants to South Florida. Mothers with children were interviewed in their homes and in their native language using a 110 item Child-Rearing Beliefs and Practices questionnaire. Many topics were covered in the interviews, but only those related to independence training and social autonomy were presented in this article. The questionnaire took approximately three hours to administer and consisted of mostly semistructured questions, with interviewees being asked to elaborate on their responses. Results show that 23% of Cuban mothers would never allow their child to play away from home before adolescence, 45% would not allow the child to go to the store alone, and Cuban mothers were more restrictive in allowing their child to go to the movies, sporting events, or dances independently. Culturally, it is the responsibility of the mother "to ensure that children are supervised, protected from physical harm, and provided with emotional security" (DeSantis & Thomas, 1994, p. 265). As the majority of Hispanics in Miami are Cuban American, these findings may have implications for current research. Due to the cultural practices of Cuban parents, many may be considered to be overprotective as compared to American standards (DeSantis & Thomas, 1994).
However, it remains to be seen whether this "overprotectiveness" translates into an increased use of protective equipment among Cuban school-aged and adolescent children. One limitation of the study is that results cannot be generalized beyond the populations studied. Another limitation suggested by the authors is that the norms for American cultural beliefs and practices used as a comparison in this study may not truly be representative of American society.

Summary

The literature shows that accidents remain a high contributor to the morbidity and mortality of school-aged and adolescent children. The incidence of accidents is shown to change with the population of children studied. Many studies reviewed point out the lack of parental knowledge of safety issues and a lack of use of preventive equipment by parents and their children. Few studies found in the literature have included the Hispanic population as a group when reporting the incidence of accidents. No studies were found that describe the safety habits of this particular population. There were also no studies found that describe parental perceptions of risk for their children, knowledge of injury prevention, or safety habits currently employed by Hispanic parents for their children. In order to implement safety teaching with Hispanic clients, information on the use of safety equipment among this group is necessary.
Chapter III
Methodology

In this chapter the research design of the study, the setting, and the sample will be discussed. The data collection procedures and questionnaire will be explained, along with the protection of human subjects. The types of data analysis used will also be included.

Research Design

The research design utilized for this study was exploratory-descriptive. A questionnaire was used to explore what safety habits were presently promoted by Hispanic parents for their school-aged and adolescent children and the frequency of use for these safety habits. Demographic information was also obtained from the questionnaire for descriptive purposes.

Setting

This research was conducted in primary care pediatrician offices in the Miami and Homestead areas.

Sample

The sample consisted of Hispanic parents of patients visiting a primary care pediatrician's office on random days. The inclusion criteria included Hispanic biological parents, whose children were between the ages of 6 and 19 years. The exclusion criteria included (a) non-Hispanic parents and children, (b) parents of patients being treated for a chronic illness, (c) parents of a patient with a developmental or physical disability, and (d) parents who do not read or write either English or Spanish.

Data Collection Procedure

A convenience sample of Hispanic parents meeting the above mentioned inclusion criteria were given an information sheet (Appendix B and D) and asked to participate in the study while waiting to be seen by the physician. Questionnaires were available in both English and Spanish. The surveys were returned when the patient and parent were called
into the office. The confidentiality of the parent and child was maintained, as there were no identifying names or numbers on the questionnaires.

Questionnaire

The questionnaire utilized for this study (Appendix A and C) consisted of 24 questions and took approximately 10-15 minutes to complete. The first 10 questions inquired about seatbelt, bicycle helmet, and safety equipment usage, as well as boating, all-terrain vehicle (ATV), and water safety. Questions regarding the frequency with which the children engage in these safety habits were also included. The last 14 questions were to gather pertinent demographic information from the participants. The questionnaire was available in English and Spanish.

The English version of this questionnaire was used as part of a prior research study on home safety habits of hospitalized children. Written permission for use and translation of the questionnaire was obtained from the researchers. Some questions from this original questionnaire were amended in format. The questionnaire was translated into Spanish by a professional translator. A panel of experts were asked to review the questionnaire in Spanish for content and clarity. There was no information available on the reliability or validity of the questionnaire.

Protection of Human Subjects

Written consent was not required of participants in the study. Participants were instructed in the information letter that by filling out the questionnaire they were giving their permission for inclusion into the study. There were no identifying names or numbers on the questionnaires. Participants were also informed that their participation in completing the questionnaire was on a voluntary basis, with no repercussions to them or their child, if they decided not to participate in the study.
The results of the questionnaires were reported in terms of group data only, in order to maintain confidentiality. Finally, there were no foreseeable risks or discomforts to which the participants were subjected.

Data Analysis

As this was an exploratory-descriptive study, the data obtained were at a nominal level. Results were described in terms of frequency distributions and percentages. Contingency tables were utilized to compare groups and their safety habits, as well as any demographic differences noted between the groups of Hispanics surveyed. Chi-squared analysis were performed to determine differences between Cuban Americans versus all other Hispanics in relation to safety habits and demographics, where possible.
Chapter IV
Presentation of findings

The results of the safety habits questionnaire reported by Hispanic parents for their school-aged and adolescent children are provided in the following pages. Characteristics of the sample obtained and the findings in relation to the two research questions are discussed and presented in tables. In the form of frequencies and percentages, these data describe the perceptions of Hispanic parents about the activities in which their children participate, the safety equipment the children utilize, and how often this safety equipment was actually worn.

Characteristics of the Sample

The sample included 48 Hispanic parents of school-aged or adolescent children seen in a primary care physician's office. The sample obtained, although small, was fairly well distributed. Fifty percent of all respondents were Cuban Americans, which is reflective of the population in Miami-Dade County. Puerto Ricans were the next largest group, followed by Mexican Americans and "other" Hispanics. The "other" Hispanic group consisted of a few non-specified respondents and those that fit into more than one category, such as Cuban American and Mexican American or Cuban American and Puerto Rican. The smallest group of Hispanics were South Americans. The majority of parents, 63.8 %, were married, followed by 12.8 % of parents who had never been married. Fifty percent of parents were between 31 and 40 years of age, and 68.1 % of the sample were employed. The complete frequencies and percentages for these variables are presented in Table I.
Table I

Percentages of Demographic Variables Including Ethnicity, Marital Status, and Age

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cuban American</td>
<td>24</td>
<td>50.0</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>7</td>
<td>14.6</td>
</tr>
<tr>
<td>Mexican American</td>
<td>6</td>
<td>12.5</td>
</tr>
<tr>
<td>South American</td>
<td>5</td>
<td>10.4</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>12.5</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>30</td>
<td>63.8</td>
</tr>
<tr>
<td>Never married</td>
<td>6</td>
<td>12.8</td>
</tr>
<tr>
<td>Married, but separated</td>
<td>5</td>
<td>10.6</td>
</tr>
<tr>
<td>Divorced</td>
<td>5</td>
<td>10.6</td>
</tr>
<tr>
<td>Widowed</td>
<td>1</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>Age of Parent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 - 40</td>
<td>24</td>
<td>50.0</td>
</tr>
<tr>
<td>&lt; 30</td>
<td>16</td>
<td>33.3</td>
</tr>
<tr>
<td>41 - 50</td>
<td>8</td>
<td>16.7</td>
</tr>
</tbody>
</table>

The ages of the children ranged from 6 - 18 years, with 8 year-olds comprising the largest group (20.8 %) in the sample. Nine year-olds made up 14.6 % of the sample, followed by 6 year-olds (12.5 %), 11 year-olds (10.4 %), and 12 year-olds (10.4 %). The other age groups were fairly well distributed. Most families had two children living in the
home (45.8%). Other family sizes included 16 respondents with one child, nine with three children, one with four, and none with more than four children. Three families had another child in the family, other than the child that was being reported upon in the questionnaire, who had a disability. These included autism, paralysis of the right arm, and one non-specified disability. Six families had a child in a special health or developmental program. Ten point nine percent (10.9%) of the children were in daycare. In regard to work hours, 80.7% of parents worked 40 or more hours a week, while 10.4% were in a student or job training program. The sample was well distributed among all income and educational levels, as presented in Table II.

Table II

Frequencies and Percentages for Income and Education of Parents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 20,000 dollars</td>
<td>8</td>
<td>18.2</td>
</tr>
<tr>
<td>20 - 29,999 dollars</td>
<td>8</td>
<td>18.2</td>
</tr>
<tr>
<td>30 - 39,999 dollars</td>
<td>6</td>
<td>13.6</td>
</tr>
<tr>
<td>40 - 49,999 dollars</td>
<td>6</td>
<td>13.6</td>
</tr>
<tr>
<td>50 - 75,999 dollars</td>
<td>11</td>
<td>25.0</td>
</tr>
<tr>
<td>&gt; 75,999 dollars</td>
<td>5</td>
<td>11.4</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 yrs. or less</td>
<td>8</td>
<td>20.0</td>
</tr>
<tr>
<td>12 yrs. (high school diploma)</td>
<td>12</td>
<td>30.0</td>
</tr>
<tr>
<td>13-14 yrs. (Associate)</td>
<td>9</td>
<td>22.5</td>
</tr>
<tr>
<td>15-16 yrs. (Bachelor's)</td>
<td>11</td>
<td>27.5</td>
</tr>
</tbody>
</table>
The first two questions of the questionnaire were intended to obtain a recent injury history on the children. Interestingly, over a quarter of the sample had experienced an injury in the past year. Five children were reportedly hospitalized. The results are presented in Table III.

Table III

**Recent Injury History**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes</th>
<th>Percent</th>
<th>No</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury in the past year</td>
<td>17</td>
<td>35.4</td>
<td>31</td>
<td>64.6</td>
</tr>
<tr>
<td>Treated by healthcare professional</td>
<td>21</td>
<td>48.8</td>
<td>22</td>
<td>51.2</td>
</tr>
<tr>
<td>If yes, was child hospitalized</td>
<td>5</td>
<td>23.8</td>
<td>17</td>
<td>76.2</td>
</tr>
</tbody>
</table>

However, results did not appear to reflect only injury-related healthcare visits as intended. This can be seen by the larger number of respondents who stated that their child saw a healthcare professional than were actually injured in the past year. When chi square (χ²) tests were analyzed on the Cuban versus non-Cuban groups in regard to whether their child was seen by a healthcare professional, a marginally significant difference was found between groups. Sixty-two percent of Cuban children were seen by a healthcare professional, while only 36.4% of non-Cuban children were, χ² (1, n = 43) = 2.81, p < .09. Although indicative that the Cuban children in the sample sought healthcare more frequently than non-Cubans, it cannot be determined through the questionnaire if these visits were related to safety issues or not.
Fifty percent of the children in the sample were reported by parents to be involved in organized sports. The most popular sports were basketball (28.6%) and soccer (19%). Football, karate, and baseball were also mentioned frequently by respondents.

**Research Question One**

What are the safety habits promoted by Hispanic parents for their school-aged and adolescent children? This question was answered in two parts. First parents were asked if the child participated in a particular activity. Second, parents were asked if the child wore protective equipment during this activity.

Thirty-seven point five percent (37.5%) of the children participated in skateboarding. When subgroups of Hispanics were compared, a marginally significant difference was noted. Fifty percent of Cuban children skateboarded, while only 25% of non-Cubans did, \( \chi^2 (1, N = 48) = 3.20, p < .07 \). Cuban children may, therefore, be at higher risk for injury from skateboarding than non-Cuban children. Rollerskating or rollerblading, which is overall becoming increasingly popular in South Florida, was participated in by 87.5% of the sample.

Due to the climate and prevalence of oceans, pools, bays, and lakes in South Florida, awareness of water safety habits was fairly high among the sample. Forty-two point six percent (42.6%) of respondents' children engaged in boating activities, while 57.4% did not. Upon further examination, a significant difference was found between groups of Hispanic parents perceptions about boating activities. Fifty-eight percent of Cuban children went boating but only 26% of non-Cubans did, \( \chi^2 (1, n = 47) = 5.00, p < .025 \). As a result, Cuban children may be at higher risk to sustain a boating injury than non-Cuban children. Forty-two children, or 87.5% of those questioned, were involved in swimming activities, while only 12.5% were not.

Another two questions inquired about bicycle and motorcycle riding activities for the overall sample. Eighty-seven point five percent (87.5%) of the sample
rode bicycles, while 12.5 % did not. In contrast, only 12.5 % of the sample rode motorcycles or all terrain vehicles (ATV,s), while 87.5 % did not.

For each of the activities in question, parents reported that their children did wear specific safety equipment more than 50 % of the time. The frequencies and percentages of time protective equipment was worn during these activities is presented in Table IV.

Table IV
Frequency and Percentage of Sample that Wears Protective Equipment During Activities

<table>
<thead>
<tr>
<th>Activity (Is equipment worn during...?)</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Riding a bicycle</td>
<td>29</td>
<td>70.7</td>
</tr>
<tr>
<td>Skateboarding</td>
<td>9</td>
<td>52.9</td>
</tr>
<tr>
<td>Rollerskating/Rollerblading</td>
<td>28</td>
<td>66.7</td>
</tr>
<tr>
<td>Boating</td>
<td>17</td>
<td>94.4</td>
</tr>
<tr>
<td>Swimming</td>
<td>36</td>
<td>87.8</td>
</tr>
<tr>
<td>Motorcycle/ATV</td>
<td>4</td>
<td>80.0</td>
</tr>
</tbody>
</table>

Research Question Two

What percentage of the time do Hispanic school-aged and adolescent children utilize safety equipment? The most important finding from question two is how dramatically the number of children being protected from injury decreases when it is determined how often they actually wear the safety equipment. The number of children protected 100 % of the time for each activity is quite small. For example, approximately
half of all skateboarders wear protective equipment, nine children in this case. However, only 15% of those children wear the equipment 100% of the time. This literally means that out of 17 skateboarders, only one to two children wear their equipment 100% of the time. Rollerbladers fared better in comparison. More children wore the equipment, and 42% of them wore it all of the time. When chi-square tests were done it was found that 77% of children of employed parents wore protective equipment while rollerblading, but only 47% of children of not employed parents did, $\chi^2 (1, n = 41) = 3.87, p < .04$. This suggests that perhaps economic factors prevented these parents from supplying their children with the proper equipment to prevent injury, although the children did still participate in the activity. The frequencies and percentage of time protective equipment is worn during these two activities is presented in Table V.

Table V

Percentage of Time Protective Equipment Worn During Skateboarding and Rollerblading

<table>
<thead>
<tr>
<th>Percent of time equipment worn</th>
<th>Frequency</th>
<th>Percent</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skateboarding</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall equipment usage</td>
<td>9</td>
<td>52.9</td>
<td>8</td>
<td>47.1</td>
</tr>
<tr>
<td>How often is equipment worn</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 25%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 - 50%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51 - 75%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>76 - 99%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(table continues)
Percent of time equipment used | Frequency | Percent | Frequency | Percent
---|---|---|---|---
Rollerblading
Overall equipment usage       | 28 | 66.7 | 14 | 33.3
How often is equipment worn
0 - 25%                        | 11.5
26 - 50%                       | 7.7
51 - 75%                       | 19.2
76 - 99%                       | 19.2
100%                            | 42.3

As expected, compliance with water safety habits was the highest among all activities reported in the questionnaire. Ninety-four percent (94 %) of children who go boating had lifejackets. Seventy percent (70 %) used the lifejackets 100 % of the time. Eighty-eight percent (88 %) of children were able to swim. Of these, 79 % swim with adult supervision all of the time. The frequencies and percentages of water safety habits are reported in Table VI.

Table VI

Percent of Water Safety Habits Implemented

<table>
<thead>
<tr>
<th>Percent of time habits utilized</th>
<th>Frequency</th>
<th>Percent</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
</table>
Child has a lifejacket         | 17 | 94.4 | 1 | 5.6 |
How often lifejacket worn
51 - 75%                        | 15 | (table continues)
<table>
<thead>
<tr>
<th>Percent of time habits utilized</th>
<th>Frequency</th>
<th>Percent</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>76 - 99%</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child can swim</td>
<td>36</td>
<td>87.8</td>
<td>5</td>
<td>12.2</td>
</tr>
<tr>
<td>Swims with adult or lifeguard supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 - 50%</td>
<td>2.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51 - 75%</td>
<td>4.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>76 - 99%</td>
<td>14.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>78.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The final three safety questions inquired about bicycle, motorcycle, and seat belt use by the children. As demonstrated again with these activities, the number of children being protected from injury was decreased when it was determined how consistently they wore safety equipment. For example, 71% of children were reported to wear helmets while bicycling. This was 29 out of 41 children. Yet, 10 children wore the equipment less than 50% of the time. Only 43%, or 12 out of 41 children, were wearing bicycle helmets 100% of the time. In addition, chi-square analysis showed a significant difference between Cuban parental perceptions and non-Cuban parental perceptions with respect to the number of children wearing helmets while bicycle riding. Ninety percent (90%) of Cuban children were perceived to wear bicycle helmets, but only 55% of non-Cuban parents perceived their child to wear them, $\chi^2 (1, n = 41) = 6.00, p < .01$. Non-Cubans in this sample were, therefore, at higher risk for injuries related to bicycle accidents.

In comparison, motorcycle helmet use was slightly higher and more consistent than bicycle helmet use. No differences were found between groups for motorcycle helmet use.
As expected, since there is a mandatory seatbelt law for the state of Florida now in effect, seatbelt use was reported to be relatively high. However, use of a seatbelt was still not practiced consistently by 25% of the sample. Further, respondents reported that seatbelts were used 100% of the time by 76.6% of their children. The frequency and percentage of time that helmets and seatbelts were worn is described in Table VII.

Table VII

**Frequency and Percentage of Sample that Wear Helmets and Seatbelts**

<table>
<thead>
<tr>
<th>Percent of time equipment is worn</th>
<th>Frequency</th>
<th>Percent</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycle helmet usage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>70.7</td>
<td>12</td>
<td>29.3</td>
<td></td>
</tr>
<tr>
<td>How often bicycle helmet worn</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 25%</td>
<td>16.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 - 50%</td>
<td>16.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51 - 75%</td>
<td>10.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>76 - 99%</td>
<td>13.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>43.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycle/ATV helmet usage</td>
<td>4</td>
<td>80.0</td>
<td>1</td>
<td>20.0</td>
</tr>
<tr>
<td>How often motorcycle/ATV helmet worn</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51 - 75%</td>
<td>25.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>76 - 99%</td>
<td>25.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>50.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(table continues)
<table>
<thead>
<tr>
<th>Percent of time equipment is worn</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often seatbelts worn</td>
<td></td>
</tr>
<tr>
<td>0 - 25%</td>
<td>2.1</td>
</tr>
<tr>
<td>26 - 50%</td>
<td>0.0</td>
</tr>
<tr>
<td>51 - 75%</td>
<td>12.8</td>
</tr>
<tr>
<td>76 - 99%</td>
<td>8.5</td>
</tr>
<tr>
<td>100%</td>
<td>76.6</td>
</tr>
</tbody>
</table>
Chapter V

Discussion of Findings, Implications, Limitations, and Recommendations

In this chapter, findings of the current study will be compared to prior research. Implications of the results and limitations of the study will be presented. Finally, recommendations for future research will be suggested.

Discussion of findings

On the topic of safety, Eichelberger, Gotschall, Feely, Harstad, and Bowman (1990) concluded from their national telephone survey that parents had a poor understanding of many childhood safety issues. The findings this study suggest the same, as utilization of safety equipment was not consistently promoted or enforced by Hispanic parents during their child's daily activities.

Glik, Kronenfeld, and Jackson (1991) found that parents who had direct experience with a previous injury showed an increased awareness of risk. Similarly, Russell and Champion (1996) found that mothers with a previous injury experience were more likely to have fewer hazards present in their homes. In the current study, although 35% of the children had experienced an injury in the past year, the number of children utilizing safety equipment remained relatively low. However, comparisons were not made between the 35% of respondents with a previous injury versus those with no injury reported. Therefore, it cannot be determined from this study if experience with an injury translates into increased awareness of risk or increased safety equipment usage.

Peterson, Farmer, and Kashani (1990) found that most parents felt relatively unworried about injuries and thought that they were unlikely to happen to their child. Results also showed that more safety teaching was reported when parents felt that the intervention would successfully prevent an injury. In the current study, the Hispanic parents questioned were not effective in promoting safety equipment usage among their children. Whether this is due to their lack of concern about injury, their disbelief that such
measures would prevent an injury, or simply noncompliance on the part of the children remains unknown.

Moss and Tobin (1988) found that even when parents were aware that a child would be protected from injury if restrained in a car, the frequency of use of restraints did not increase dramatically. They did find the law to be an influential factor in car seat restraint. Among the Hispanic parents questioned, it also appears that the law may have influenced the use of seatbelts. Seatbelts were worn 100% of the time by 76% of the sample, the highest percentage among all activities reported. Usage of equipment for all other activities for which there are no laws or penalties were dramatically reduced.

Miller, Binns, and Christoffel (1996) reported that many children did not own bicycle helmets and only a small percentage of the children wore the bicycle helmet all or most of the time. Most importantly, they found that children with a rule about wearing helmets were in fact more likely to wear them more often. Results of the current study were similar. Although 70% of parents reported that the child wore a bicycle helmet, the enforcement of its use was inconsistent. It was interesting to note, however, that 90% of Cuban children were reported to have worn bicycle helmets, although it was not determined how often they wore it. This was significantly different from the non-Cuban parents, whose children only wore a helmet 55% of the time. Perhaps this was one example of Cuban parents demonstrating their cultural tendency to be protective of their children and enforcing strict rules about bicycle helmet use.

Matteucci, Holbrook, Hoyt, and Molgaard (1995) and Agran, Winn, Anderson, and Del Valle (1996) both studied trauma in Hispanic children compared to non-Hispanic White children. Matteucci et al. found that the use of protective devices was considerably less for Hispanic children. Agran et al. found that injury rates were consistently higher for Hispanic children. Although no comparisons to other ethnic groups were made within the current study, its findings suggest that the use of protective equipment among the
Hispanics questioned warrants improvement if injuries are to be prevented in the future. Further, this research involved the safety habits of a specific regional group of Hispanics, not necessarily similar to the Hispanic groups previously studied.

Implications

The main implication of the findings is that Hispanic children in the Miami-Dade area are at risk for injury during daily activities due to the lack of consistent safety habits. Improvement is needed in the overall use of safety equipment. When children are participating in activities that require safety equipment, many parents responded "no" when asked whether the child wears equipment. This may imply that parents were not aware of the risk of injury to their child, were not aware that such equipment is available, or were unable or unwilling to spend money on safety equipment. Some parents and children may feel that the equipment is unnecessary. It is imperative that practitioners assess a child's risk factors and educate the family about the repercussions of not having this equipment.

Improvement is also needed in how consistently, or strictly, these safety practices are adhered to. Parents need to set rules for children about putting on equipment before routine activities such as bike riding and rollerblading are initiated. Wearing a helmet or kneepads some of the time defeats the purpose of the equipment, as it cannot prevent injury if not in use. Although there is no set standard for how often is often enough for safety practices, healthcare workers need to strive for the ideal. This would mean 100% usage of equipment, 100% of the time to minimize the likelihood of an injury occurring.

One way to improve the use of safety equipment for this population may be to provide better education to Hispanic parents regarding safety habits. Consistency in safety habits must be impressed upon parents and children. Making parents and children aware of the danger is not enough. As seen through the questionnaire, having safety equipment does not mean it is being used.
Peterson, Farmer, and Kashani (1990) and Russell and Champion (1996) both suggest that safety teaching behaviors among parents are strongly affected by how competent and knowledgeable the parents feel about a particular safety measure involved. The more parents know about safety habits, the more likely they are to teach and enforce these habits with their children.

The findings presented in this study can be used as a basis for assessing the teaching needs of the Hispanic population in the Miami-Dade area. This study was the first to explore the safety habits of this population and findings suggest areas where education is most needed. Results not only identified the activities that children were participating in, but showed the rates at which safety equipment was being utilized for each activity. Since it is vital that teaching is tailored to meet the needs of the population to be taught, the demographic information obtained from this study can provide healthcare workers in the Miami-Dade area with valuable insights into its population of Hispanics.

Previously, the literature was lacking in information about non-Mexican Hispanics, particularly those found in South Florida. This study supplements the existing literature by providing safety habit information on various Hispanic groups, including Cuban Americans. It is of particular significance to healthcare workers in South Florida, where 50% of the population is Hispanic, and 59% of this group is of Cuban descent. Safety habits of this heterogeneous Hispanic population can now be studied and compared to other groups around the country.

Marketing of safety equipment was another implication for this study. For example, rollerbladers wore equipment more consistently than skateboarders. As rollerblading is a relatively new sport, the kneepads, wristguards, blades, and helmets were all marketed together. It is more fashionable to have all the equipment than not, since it is all part of the rollerblading package. This same strategy can be implemented for other safety equipment items, such as bicycle helmets. It could be suggested that perhaps some
of the safety equipment manufacturers neglect the Hispanic market, thus decreasing awareness for this population.

Another implication of the current research was determining which activities to target for educational programs. Compliance with water and boating safety habits was high in comparison to other activities. In the future, maybe more emphasis should be directed to the activities with lower compliance rates. Activities such as bicycling and rollerblading may be viewed as less life-threatening than perhaps car accidents and drownings, yet many serious injuries do occur. This is not to imply that education is no longer needed for water safety activities, only that there are also other activities which should be emphasized. By focusing safety education and resources where they are most needed, it is anticipated that the number of injuries for Hispanic children in the Miami-Dade area will be decreased.

Limitations

One limitation of this study was that a convenience sample rather than a random sample was utilized. The sample size was relatively small in number. It was limited to those Hispanic children being seen by a physician for routine care. The generalizability of the results are, therefore, limited in these respects. Also, no other ethnic groups were included in this study, thus no comparisons can be made with non-Hispanics in regard to safety habits.

Another limitation was that the results were self-reported and, therefore, may not accurately reflect actual safety equipment usage. Also, results were reported by parents for their children and not by the children themselves. This may have caused further discrepancies in results, as the children may wear the equipment even less when not under direct parental supervision.

There were some limitations with the structure of the questionnaire. The "if yes" questions seemed to be slightly confusing to some parents who answered inappropriately,
resulting in a number of responses being discarded. In question number two it was not stated to respondents that what was being asked was whether the child had been treated by a healthcare professional for an injury in the past year, as was the intention of the author.

The wording of question seven may have caused confusion for respondents. In the English version of the questionnaire, parents were asked if the child "used" a lifejacket rather than if he/she "wore" a lifejacket. In the Spanish version parents were asked if the child "lo usa" the lifejacket, rather than "se lo pone". This may have led some parents to say that a lifejacket was in use if it was on the boat, rather than on the child, as was the intent of the question.

Also, question ten did not ask "yes" or "no" as to whether the child wore a seatbelt or not, as was done for all the other activities. Therefore, no overall percentage of use was obtained, only the percentage of time that the seatbelt was used. Lastly, more activities could have been investigated, such as personal water craft and gun safety.

Recommendations for Future Research

The first recommendation would be to expand and add to this study using a randomized sample of Hispanics with a much larger population. This would allow for further analysis to be done to determine any differences between and among the Hispanic populations in the Miami area. It would also generate more reliable and informative results. Changes in the structure of the questionnaire could be made as suggested in the limitations section above, with more questions added.

Individual groups of Hispanics, such as Nicaraguans or Colombians, could be specifically targeted. In this way, preventive education could be tailored to the needs of the specific Hispanic group studied. In contrast, the ethnic question could be expanded to include non-Hispanic Whites, African Americans, and Asians so that comparisons can be made between various ethnic groups. Another recommendation would be to group
children according to age when determining what activities they engage in and how often equipment is worn. This would generate more specific information as to what age groups need education in regard to which activities.

Educational safety programs could be developed and pre-and post-test questionnaires administered. This would help determine the effectiveness of the educational program provided. Time studies could also be used in the same way to see if an intervention affects the population over time. Lastly, rather than let parents respond, the percentages could be changed to a faces or an interval response scale so that the children of all age groups would be able to answer the questionnaires on their own.


### Appendix A

#### Survey of Safety Habits

1. In the past year has your child had one or more events you would rate as an injury?  
   - Yes  
   - No

2. Was your child treated by a health-care professional?  
   - Yes  
   - No
   - If "yes", was your child hospitalized?  
     - Yes  
     - No

3. Is your child involved in organized sports? (football, soccer, basketball)  
   - Yes  
   - No
   - If "yes", please specify: ________________________________

4. Does your child ride a bicycle?  
   - Yes  
   - No
   - If "yes", does your child wear a bicycle helmet?  
     - Yes  
     - No
   - If "yes", what percent of the time does your child wear the helmet?  
     - 0 - 25 % _____
     - 26-50 % _____
     - 51-75 % _____
     - 76-99 % _____
     - 100 % _____

5. Does your child skateboard?  
   - Yes  
   - No
   - If "yes", does your child use protective equipment? (helmet, kneepads, etc.)  
     - Yes  
     - No
   - If "yes", what percent of the time does your child wear the equipment?  
     - 0 - 25 % _____
     - 26-50 % _____
     - 51-75 % _____
     - 76-99 % _____
     - 100 % _____

6. Does your child rollerblade/rollerskate?  
   - Yes  
   - No
   - If "yes", does your child use protective equipment? (helmets, kneepads, etc.)
If "yes", what percent of the time does your child wear the equipment?  

- 0 - 25 %  
- 26-50 %  
- 51-75 %  
- 76-99 %  
- 100 %  

7. Does your child go boating?  
Yes  No  
If "yes", does your child have a life jacket?  
Yes  No  
If "yes", what percent of the time does your child use the life jacket?  

- 0 - 25 %  
- 26-50 %  
- 51-75 %  
- 76-99 %  
- 100 %  

8. Does your child go swimming?  
Yes  No  
Can your child swim?  
Yes  No  
If "yes", what percent of the time does your child swim where a lifeguard or other adult is present?  

- 0 - 25 %  
- 26-50 %  
- 51-75 %  
- 76-99 %  
- 100 %  

9. Does your child ride a motorcycle or all terrain vehicle (ATV)?  
Yes  No  
If "yes", does your child use protective equipment?  
Yes  No  
If "yes", what percent of the time does your child wear the equipment?  

- 0 - 25 %  
- 26-50 %  
- 51-75 %  
- 76-99 %  
- 100 %  

10. What percent of the time does your child wear a seatbelt in the car?  

- 0 - 25 %  
- 26-50 %  
- 51-75 %  
- 76-99 %  
- 100 %  

39
We need to know a few items of personal information about you and your family. Remember all the information is strictly confidential! There is no way that your answers will be connected to you personally.

1. What is your age?

2. What is the age of your child?

3. What is your ethnic background?
   a. Mexican American.
   b. Puerto Rican.
   c. Cuban American.
   d. Central American.
   e. South American.
   f. "Other" Hispanic, please specify: ________________________

4. What is your current marital status?
   a. Married.
   b. Married, but separated.
   c. Widowed.
   d. Divorced.
   e. Never married.

5. How many children do you have living at home with you?   ____________

6. List the ages of the children living at home with you?   ________________________

7. Do any of the children who live at home with you have a disability or handicap? Yes No
   If "yes", what type of disability do they have?   ________________________

8. Are any of the children on special health or development programs? Yes No

9. Are you employed? Yes No
   If "yes", how many hours a week do you work?   ____________

10. Are you a student or in a job training program? Yes No

11. What is the highest grade of school you have completed?   ____________
12. Is/are your child/children in day care?  Yes  No

13. What is your yearly household income before taxes?
   a. < 20,000 dollars.
   b. Between 20,000-29,999 dollars.
   c. Between 30,000-39,999 dollars.
   d. Between 40,000-49,999 dollars.
   e. Between 50,000-75,000 dollars.
   f. > 75,000 dollars.

14. How many people (adults and children) are living in your household? ________

Thank you very much! Your help with this survey is greatly appreciated!
Dear Parents,

My name is Mary E. Ernst, R.N. and I am a graduate nursing student at Florida International University. I am doing a research study about the safety habits of Hispanic children. Childhood injuries affect more children each year than cancer, heart disease, and infectious diseases combined. A majority of these injuries can be prevented. Many parents, however, are not aware of the dangers that their children face during everyday activities.

We would like to find out what safety habits parents currently practice with their children. Could you please take a few minutes of your time and answer the following questions? The questions are available in both Spanish and English, depending upon your preference. All answers that you provide for us are strictly confidential and can in no way be connected to you. Please answer the questions as honestly as possible. By completing the questionnaire, you are giving permission for your answers to be included in the research study entitled "Safety Habits Promoted by Hispanic Parents for School-aged and Adolescent Children". Thanks for your time and participation in the study.

If you have any questions or would like research results please contact:

Mary E. Ernst, BSN, RN  
Principal Investigator  
(305) 598-4642

or

Sandra Lobar, PhD, ARNP  
Major Professor  
(954) 236-1530
Estudio De Los Hábitos de Seguridad

1. ¿En el último año ha tenido su hijo, uno o más incidentes que usted considere una lesión?
   Sí  No

2. ¿Fue tratado su hijo por un médico profesional?
   Sí  No
   ¿Fue su hijo hospitalizado?
   Sí  No

3. ¿Está su hijo participando en actividades deportivas (fútbol, baloncesto)?
   Sí  No
   Por favor especifique: ________________________________

4. ¿Su hijo monta bicicleta?
   Sí  No

   De ser así, ¿usa su hijo un casco protector?
   Sí  No
   ¿Cuál es el por ciento del tiempo que su hijo usa el casco protector?
   0 - 25 %   _____
   26-50 %   _____
   51-75 %   _____
   76-99 %   _____
   100 %   _____

5. ¿Su hijo monta patineta/"skateboard"?
   Sí  No

   De ser así, ¿usa su hijo equipos protectores (rodilleras, casco, etc.)?
   Sí  No
   ¿Cuál es el por ciento del tiempo que su hijo usa el equipo protector?
   0 - 25 %   _____
   26-50 %   _____
   51-75 %   _____
   76-99 %   _____
   100 %   _____

6. ¿Su hijo patina?
   Sí  No

   De ser así, ¿usa su hijo equipos protectores (rodilleras, casco, etc)?
   Sí  No
¿Cuál es el por ciento del tiempo que su hijo usa el equipo protector?

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<th>Porcentaje</th>
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7. ¿Hace su hijo actividades acuáticas, como paseos en botes?

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<tr>
<td>¿Hace uso su hijo de salvavidas o de chalecos flotantes?</td>
<td>Si</td>
<td>No</td>
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<td>Der ser así, ¿cuál por ciento del tiempo lo usa?</td>
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8. ¿Su hijo practica la natación?

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<td>¿Sabe nadar su hijo?</td>
<td>Si</td>
<td>No</td>
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<td>De ser así, ¿cuál es el por ciento del tiempo que su hijo nada bajo la supervisión adulta?</td>
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9. ¿Monta su hijo motocicleta?

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<tr>
<td>De ser así, ¿utiliza su hijo casco protector?</td>
<td>Si</td>
<td>No</td>
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<tr>
<td>¿Cuál es el por ciento del tiempo que su hijo usa el casco protector?</td>
<td>0 - 25 %</td>
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10. ¿Cuál es el por ciento del tiempo que su hijo usa el cinturón de seguridad del automóvil?

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