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Comparison of the Acceptability of Discipline Practices between Chinese Medical Students and Residents and US Medical Students

A Thesis Submitted to the

Yale University School of Medicine

in Partial Fulfillment of the Requirements for the

Degree of Doctor of Medicine

by

Brady John Heward

2011

Abstract

Comparison of the Acceptability of Discipline Practices between Chinese Medical Students and Residents and US Medical Students

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Identifying a global definition of child abuse is a challenge. Culture influences perception both about what constitutes appropriate disciplinary practice and about what action should be taken if an abused child is identified. We hypothesized that medical trainees in China would have significant differences in attitudes about childhood discipline when compared to medical trainees in the United States (US). In addition, because China lacks the structure of a child welfare system, we questioned what actions Chinese medical trainees would propose if they were to identify an abused child.

We conducted a cross-sectional survey at Xiangya Medical School and Yale Medical School to compare the acceptability of 37 childhood discipline practices and to assess Xiangya student and resident opinions on reporting abuse. Ninety-four Chinese medical students, 154 Chinese residents, and 63 US medical students (97%, 77% and 64% of those invited, respectively) completed the questionnaire.

Attitudes regarding 13 and 9 of the 37 discipline practices differed significantly between Yale and Xiangya students and Xiangya students and residents respectively. More Xiangya students found restrictive and verbal discipline practices unacceptable than

Yale students, while more Yale students found corporal discipline practices unacceptable. Xiangya residents were more accepting of most discipline. Yale students were most likely to identify discipline practices as in need of intervention. Xiangya students and residents reported similar rates of experiencing corporal punishment in school (47.9% and 48.1% respectively, $p=0.978$) while Yale students reported a significantly lower rate (12.7%, $p<0.001$). Xiangya students reported the highest rate of childhood physical abuse (48.9%) compared to Xiangya residents (29.9%, $p=0.003$) and to Yale students (6.3%, $p<0.001$). Only 68.1% of Xiangya students and 75.2% of Xiangya residents ($p=0.241$) compared to 100% of Yale students felt that abuse is a problem in their respective countries (student comparison $p<0.001$). More than 50% of Xiangya respondents indicated family, government, police, neighbors and health professionals as having responsibility to intervene/report abuse and the government, police and Women's Federation as groups to whom abuse should be reported.

Yale students, Xiangya students, and Xiangya residents differ significantly with respect to what they identify as acceptable discipline and what discipline practices they believe warrant intervention to protect a child. Despite significantly higher rates of personal experience with physical abuse and corporal punishment in school, Chinese trainees were less likely to recognize abuse as a problem in their country. Chinese trainees identified a diffuse group of those responsible for reporting child abuse and a similarly diffuse group of those to whom abuse should be reported.

Continued research about the nature and extent of child abuse would improve understanding of the nature of the problem in China. Given the high reported rates of child abuse by individuals in China, both improved recognition of abuse as a national

problem to be solved as well as development of a robust child welfare system are essential for the protection of Chinese children.

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INTRODUCTION

Efforts to Define Child Abuse

Since the publication of "The battered-child syndrome" in 1962, a proliferation of research and publications regarding child maltreatment has occurred (1). This landmark article represented the first descriptive look at the epidemiology of child maltreatment. Subsequent research has lead to further understanding of the nature and consequences of the problem, providing evidence to support legislation in the United States to protect children. Currently, all 50 states have a form of child protective services designed to assess safety, intervene to protect children from harm, strengthen families, and provide for a safe family environment (2). Additionally each state has laws requiring certain professionals that frequently interact with children, such as teachers and doctors, to report suspected maltreatment. Similarly, research and subsequent legislation have occurred in other countries throughout the world to protect children. Child maltreatment is now recognized, at least by the World Health Organization (WHO), as a global problem "deeply rooted in cultural, economic and social practices" (3).

An accurate definition of child maltreatment is necessary to understand the global burden and to appropriately intervene and prevent. Cultural differences in defining appropriate discipline and child treatment make a universal definition problematic. In an effort to define abuse, the WHO convened child abuse experts in 1999. They defined abuse as the following:

> ''Child abuse or maltreatment constitutes all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival,

> development or dignity in the context of a relationship of responsibility, trust or power'' (4).

In spite of the fact that a single definition was reached by the convened experts, those convened recognized the inadequacy of a single definition in all settings. They reported:

> " . . . that one definition of child abuse cannot serve all purposes; for example a definition that would serve to increase awareness differs from that for service provision, and a definition for legal purposes differs from that for research. For that reason a diagnosis must be adaptable and include descriptions of different types or classifications which can be adapted and/or expanded on as is appropriate for the setting" (4).

The adaptability of the above definition, while necessary for universality, allows for ambiguity, multiple interpretations, and cultural relativism. Is "ill-treatment" defined based on accepted cultural practices, on the "actual or potential harm," or the intent to be cruel or do harm? If based on the actual or potential result of the action or the intention within which it was performed, what differentiates a culturally acceptable discipline practice with perceived benefits but potential for harm from abuse?

The World Health Organization definition is not the only attempt to define abuse. Finkelhor and Korbin provided the following definition: "Child abuse is the portion of harm to children that results from human action that is proscribed, proximate, and preventable" (5, 6). They further defined the terms "proscribed" (an action that not only causes harm, but is also negatively valued), "proximate" (an action must be close in time and space), and "preventable" (an alternative action needs to be available). They continued to describe six dimensions that further help to define abuse: intentionality,

social acceptability, international acceptability, societal versus individual causation, children as sole or joint victims, and societal views regarding personhood of children (5). While these dimensions help to delineate when certain actions should be classified as abuse, they equally demonstrate the degree to which cultural beliefs and practices make it difficult to clearly define abuse. This definition highlights the importance of understanding cultural norms in order to accurately judge human action but also suggests that certain practices, though locally acceptable, might be internationally unacceptable and warrant the label of abuse. Two examples of such practices include female genital mutilation and using children to clear minefields (5, 7).

Some researchers have made cultural belief systems central to the process of identifying abusive behavior and defined abuse in terms of actions that are judged by communities, parents, and professional experts as inappropriate or damaging (8-10). Even absent the possible influence of an outside belief system superimposed on local culture, Maitra argues that part of the difficulty in defining abuse is determining whether the intention of the perpetrator or the harm caused by the action predominates the definition (11). She further states that the intent and context of an action determine whether an observer or victim views the behavior as abusive. In a survey of Palauan teachers, Collier et al. found that the intention to discipline had a moderating effect on the acceptability of physical punishment (9). Elliott et al. found similar results in a survey of 401 Singaporean adults. They found that inherent in the idea of "abuse" in the respondents was the idea of intentionality to harm. Additionally, the "good intentions" of the adult made severe discipline (e.g. caning) more acceptable (12).

If harm or potential for harm are the only requirements for determining abuse

what difference exists between a failed surgery with resultant pain and a physical punishment (11)? In both cases the intention is to help the child, both have the known consequence of pain or suffering, and arguably both have potential benefits. However, intention can also not be the only method of determining abuse as multiple studies have shown that abuse is most often intended as punishment (13).

Defining Physical Abuse. The WHO convention defined child physical abuse as follows:

> "Physical abuse of a child is that which results in actual or potential physical harm from an interaction or lack of an interaction, which is reasonably within the control of a parent or person in a position of responsibility, power or trust. There may be a single or repeated incidents" (4).

Again in 2002 the WHO defined physical abuse as "those acts of commission by a caregiver that cause actual physical harm or have the potential for harm" (3). Both these definitions focus on the actual or potential for harm and do not address the intention of the action. In addition both highlight the necessity of the perpetrator being in a position of authority. As with the general definition of child abuse, there is ample room for individual and societal interpretations of the definition. What constitutes "harm"? Is "harm" limited to physical consequences of the action, and how long must those consequences persist? In 2006, the WHO further clarified:

> "Physical abuse of a child is defined as the intentional use of physical force against a child that results in – or has a high likelihood of resulting in – harm for the child's health, survival, development or dignity. This includes hitting, beating, kicking, shaking, biting, strangling, scalding, burning, poisoning and suffocation.

> Much physical violence against children in the home is inflicted with the object of punishing" (14).

It has been estimated that 80-98% of children world wide suffer physical punishment with up to a third suffering severe physical punishment from an implement (15). With widespread use and acceptance of physical punishment what distinguishes it from physical abuse? Physical punishment has been defined as the "use of physical force to inflict pain, but not injury, in disciplining children or controlling children's undesirable behaviors" and physical abuse as the use of "physical violence to inflict pain and injury" (16). Others have stated that a physically abused child is "any child who receives a non-accidental physical injury as a result of acts… on the part of his parents or guardians" (17).

Defining Emotional Abuse. The WHO defined emotional abuse as follows:

> "Emotional and psychological abuse involves both isolated incidents, as well as a pattern of failure over time on the part of a parent or caregiver to provide a developmentally appropriate and supportive environment. Acts in this category may have a high probability of damaging the child's physical or mental health, or its physical, mental, spiritual, moral or social development. Abuse of this type includes: the restriction of movement; patterns of belittling, blaming, threatening, frightening, discriminating against or ridiculing; and other non-physical forms of rejection or hostile treatment" (14).

Emotional abuse is a component of all other types of child abuse and may have more severe and lasting consequences. These lasting consequences can include "an impact on the child's view of itself, its sense of self-esteem and its attributions to others"

(11). Like physical abuse, it can be difficult to completely and specifically define what constitutes emotional abuse. Cultural norms also contribute to differences in definitions.

Culture and Child Abuse

Maitra stated that "all experience is mediated through culturally influenced ways of perceiving, understanding, and naming" (11). The WHO explained:

> "Culture is a society's common fund of belief and behaviors, and its concepts of how people should conduct themselves. Included in these concepts are ideas about what acts of omission or commission might constitute abuse and neglect. In other words, culture helps define the generally accepted principles of child-rearing and care of children" (3).

In the child abuse literature, culture, ethnicity, and race are often used as proxies for one another. These terms, while they share certain characteristics, are not interchangeable. In 2006, Miller and Cross reviewed the available literature on ethnicity and culture and provided the following definitions:

> "Race can be broadly defined as a group of local geographic peoples distinguished by genetically transmitted physical characteristics. Ethnicity can be defined as the character, background, or affiliation of an area in which a person identifies, whereas culture refers to the attitudes and behaviors that are characteristic of a particular social group" (18).

Others have defined ethnicity as "membership in a group based on a common ancestry, heritage, culture, or history," and culture as "the shared values, behaviors, beliefs, norms, traditions, customs, and ideas of subgroups of individuals" (19). Miller and Cross further describe one of the common follies in child abuse research as "ethnic lumping,"

combining multiple ethnic groups for the purpose of data analysis, a practice that they condemned but used in their own data analysis (18). Researchers often use ethnicity to represent culture, particularly when studying immigrant populations in the United States, though acculturation is often an uncorrected confounding variable. Regardless of the limitations caused by ethnic lumping, nonequivalent proxy variables, and acculturation, multiple studies have shown a cultural impact on child abuse (18, 19). There are three ways that culture influences child abuse: first, it changes the definition depending on cultural norms; second, it influences the prevalence; and third, it influences the impact and consequences.

As previously described, according to Finkelhor and Korbin's definition, actions defined as abuse must not only harm or have the potential to harm, but they must be seen as socially inappropriate (5). Cultures differ on what they view as physically or emotionally abusive parenting practices (20). Segal indicated that because definitions, causes, and effects of abuse may not be universal, abuse must be evaluated based on "socio-cultural environments" (21). Roer-Stier described an example of culturally specific views of abuse and neglect. Israelis commonly reported former Soviet Union families to welfare authorities for neglect as they often locked young children alone in their houses. The families later expressed their confusion at the charges as their intention was to keep their children safe from the dangers outside of the home (22). In 1981, Asnes and Wisotsky described the case of an 8-year-old with an upper respiratory infection who on exam was found to have 8 ecchymotic lesions, inflicted by the mother as a traditional therapy (23). In Singapore 71.5% of respondents found caning to be appropriate sometimes or always as discipline, a practice that would widely be considered abuse in

the West (12). Roer-Stier also reported cases of children of immigrant parents reporting their parents for physical abuse based on local laws and traditions that were more strict compared to the culture and laws of parents country of origin (22). Regional variation also exists in the United States with differing levels of support for physical punishment. In 2003, it was reported that 23 states still allowed for corporal punishment in schools with 1.5 million reported cases of physical punishment in school per year and an estimated 2-3 million actual cases (24). Southern and Southwestern states are the most likely to physically punish children, a practice largely illegal in the Northeast and other regions of the country.

While definitions can be dependent on cultural norms, evidence also exists to show differences in prevalence and severity of child abuse (25). Brenner et al. found a higher proportion of shaken baby syndrome among White abused infants compared to Black infants (26). In a survey of substantiated cases of sexual abuse, Whites and Asians were less likely to be victims of anal or vaginal intercourse compared to Blacks and Hispanics (27). In a survey of female college and graduate students, it was found that Latina, East Asian, South Asian, and Middle Eastern women had higher rates of childhood physical abuse than reports of matched White and African American samples (28). Multiple other studies show different rates of abuse between racial and ethnic groups, though most use ethnic lumping or race/ethnicity as a proxy for culture.

Discipline is most likely to be effective when children perceive it to be reasonable and normative but when it oversteps these bounds it is likely to be less effective and may lead to increases in problematic behavior (20). According to Rohner's parental acceptance-rejection theory, if children experience and interpret behavior as

rejection then it will lead to deleterious effects on learning and adjustment (29). It has been hypothesized that in cultures where physical discipline is more acceptable, children do not experience discipline as rejection but as “good and caring parenting” (29). Deater-Deckard et al. found that harsh physical punishment was associated with higher rates of externalizing behavior and aggression only in European Americans and not in African Americans and even found evidence of lower externalizing behavior and aggression with harsh physical discipline in African Americans. This trend held only for harsh physical punishment not in the abusive range (30). These trends were replicated in a later study, which additionally found that African Americans had higher rates of physical punishment (31). Others have suggested that higher rates of nurturing behavior offset higher rates of physical punishment and make the behavior less deleterious for the child (25). With evidence of differences between racial and ethnic groups within the United States, it stands to reason that greater differences may exist outside of the United States.

Though fewer in number, there are studies that address and that show international differences in the consequences of abuse. Lansford et al. conducted a study to determine the impact of perceived normativeness on consequences of physical punishment in Thailand, China, the Philippines, Italy, India, and Kenya (29). The researchers interviewed 336 mother-child dyads regarding the frequency of physical punishment used by parents, the normativeness of physical punishment, and level of externalizing and internalizing behaviors in children. They found that physical discipline was associated with behavior problems in all populations sampled. However, countries with the lowest perceived normativeness of physical discipline showed the strongest positive association between mother’s use of physical discipline and their children’s

behavior problems. In addition, children's perception of normativeness was more important in moderating the link between physical discipline and aggression and anxiety than mothers' perceived normativeness. In a second study of mother-child dyads in Thailand, China, the Philippines, Italy, India and Kenya, 11 discipline techniques were assessed in terms of perceived normativeness, frequency of use, and association with children's aggression and anxiety (20). Mothers' disciplining with corporal punishment, expressing disappointment, and yelling were significantly associated with increased child aggression. In addition, giving time-outs, corporal punishment, expressing disappointment, and shaming were significantly associated with increased anxiety. Children's beliefs about the normativeness of the discipline dampened the strength of the correlation, but did not reverse it.

Miller and Cross examined the use of ethnicity as a variable in child abuse analyses in 489 research articles in three journals from 1999 to 2002 (18). Of the articles, 67.1% had American samples, and 23.9% used ethnicity in data analysis. They found that of the articles that used ethnicity in analysis, 54.7% reported a significant difference between ethnic groups. In 2008, Durrant reviewed the available literature on cultural, ethnic, and racial impact on the consequences of physical punishment and abuse (13). He argued that overall though culture may moderate the consequences of abuse, most consequences are uniformly expressed across cultures. However, most of the cited articles looked at ethnic differences of US populations, arguably more culturally similar than international samples, and therefore may underestimate the impact of culture on abuse outcomes.

Child Abuse in China

Little has been written about child abuse in China in the English literature. In 2008, Dunne et al. reviewed the available English literature on child abuse in Chinese societies (32). They identified 35 articles from 1978 to 2008 meeting their criteria, with only 18 including primary data collection. Of these 18, only 8 used Mainland Chinese samples with only 2 reporting on physical abuse and the other 6 primarily reporting on sexual abuse. More is known about physical and emotional abuse and neglect in Hong Kong, Malaysia, and Taiwan, but it remains to be seen how generalizable these data are to all of Chinese societies. Xia and Qian in 2001 argued that "currently, the cultures in mainland China are quite different from those in Hong Kong or those in Taiwan, although all three may be called Chinese generally" (33). Berndt et al. found large societal differences between adult perceptions of their parents as warm and controlling between Hong Kong, Mainland China, and Taiwan (34). In their study, Hong Kong parents were perceived as less warm and more controlling than Taiwanese or Mainland parents. Taiwanese parents were warmer than Mainland parents but were similarly controlling. They summarized: "our data and other studies imply that Chinese parents in Hong Kong differ from Chinese parents in Taiwan as much as either group differs from Anglo-American parents in the United States" (34). Given this evidence, it will be useful to separate out and focus primarily on child abuse in Mainland China.

In a survey of elementary students, grades 4-6, in Shanghai and Yanji, China and Seoul and Kimpo, Korea, 70.6% of Chinese students reported that they had experienced violence in the family in the past year (42.2% minor, 22.6% serious) (35). The rate of corporal punishment by teachers was reported as 51.1% (28.0% minor, 4.1% serious, 19.0% unreported/unnoted). Similar overall rates were found in Korea, but Korea had

significantly higher rates of serious compared to minor punishment. Chinese students also experienced significantly higher rates of peer violence compared to Korean students (42.7% and 26.0% respectively).

Hesketh et al. surveyed child health care workers in 2 rural hospitals and 2 hospitals in the providence capitals of both Jiangxi and Zhejiang providences regarding their views on physical discipline and abuse (8). Of the respondents, 97% felt that physical punishment was widely used in China and 76% "generally disapproved of physical punishment." However, only 43% felt physical punishment was unacceptable at any age. Physical punishment was most acceptable between the ages of 4-13. Despite perceptions that use of physical punishment is widespread, only 6.6% of respondents reported personal experience managing child abuse and 85% admitted they did not consider child abuse when faced with an injured child. Interestingly, younger respondents were more likely to disapprove of physical punishment, suggesting an evolving degree of acceptance of physical discipline and abuse. Other researchers have observed this same trend in China (29).

In a recently published study, Wong et al. surveyed 6,593 high school students from 24 schools from ages 12-16 on their experience with psychological aggression, physical maltreatment, and sexual abuse in the previous six months and subsequent health complaints (36). They found that the six-month prevalence of maltreatment was 78.3% for psychological aggression, 23.2% for minor physical maltreatment, 15.1% for severe physical maltreatment, 2.8% for very severe physical maltreatment and 0.6% for sexual abuse. They also found a linear correlation between the severity of maltreatment and positive physical and psychological symptoms such as stomachaches, nightmares,

and suicidal ideation. Psychological aggression (being sent to their room, having privileges taken away, being threatened with physically punishment, being yelled at, being cursed at, being called names, and being threatened with expulsion from the house), minor physical maltreatment (being spanked with a bare hand, being spanked with an instrument, being slapped on the hand, arm or leg, being pinched, and being pushed), severe physical punishment (being slapped on the face, being hit by an instrument, being knocked down, or being hit with a fist), and very severe physical maltreatment (being beaten up, being chocked, being burned, being threatened with a knife, and having your head pressed under water) were predefined and not based on participant perception of the discipline practices. They additionally reported that previous studies had shown overall prevalence of child maltreatment between 40% and 62.4%.

Parenting in China

While relatively little has been written about physical and emotional abuse in Mainland China, more has been written regarding traditional parenting styles. Gershoff et al. explained that “cultures differ in the value they place on different child qualities and behaviors and in their beliefs about which parenting practices will promote these qualities and behaviors” (20). Traditional Chinese values, including Confucian thoughts and ideals, include interdependence, social harmony, filial piety, collectivism, human malleability, subordination of self for the good of the whole, persistence, self-improvement, emotional restraint and training among others (37). According to Confucian tradition, parents and families should “responsibly and justly govern, teach, and discipline” their children (38). The popular saying ‘Strict father, Kind mother’ summarizes the traditional view of how parents teach these values (34, 39, 40).

Observational and comparative studies have shown that Chinese parents are more controlling, physically coercive, and restrictive than North American parents (41). Fathers have traditionally been seen as stern disciplinarians to be feared by children, more concerned with propriety than feelings. On the other hand, mothers are viewed as more loving and kind. In a survey of more than 2,000 adolescents in Hong Kong, Shek found that in general "maternal treatment attributes were perceived to be more positive (or less negative) than paternal treatment attributes" and that "fathers were perceived to be relatively more restrictive and less concerning" (40). These differences, while significant, were not large, and both mothers and fathers treatment attributes were perceived as positive. Shek also reported that he felt this gap between these traditional parenting roles is narrowing. Studies conducted in contemporary Chinese societies indicate that parents use physical punishment because they believe that physical pain is necessary to train children to endure future hardship (16).

Chinese parenting has traditionally been viewed as more authoritarian than authoritative. Liu and Guo defined authoritarianism as " a low level of warmth, a low level of autonomy granting, and a high level of behavioral control" and authoritativeness as " a high level of warmth, a high level of psychological autonomy or democracy, and a high level of behavioral control" (42). Others have defined authoritarian parenting style as requiring unquestioning obedience and authoritative parenting as expecting open communication and mature behavior. Chao suggested that strictness associated with Asian authoritarianism might be viewed by children as parental concern and involvement (38). In a study of Canadian and Chinese mothers, Chinese mothers were found to be more authoritarian than Canadian mothers, though both Canadian and Chinese mothers

were more authoritative than authoritarian (42). In a study of 97 Mainland Chinese mothers and their children, mothers' adherence to traditional Chinese values, such as collectivism and conformity to norms, was associated with both authoritarian and authoritative parenting (43). Authoritative parenting positively correlated with level of education and social support, while authoritarian parenting correlated with parental distress. In addition, mothers' who scored highly in both authoritarian and authoritative parenting styles were found to adhere most closely with Chinese values.

Authoritarian parenting has been associated with poor school performance in European-Americans; however, in some studies this correlation has not been found to be true of Chinese children (38). Some have suggested that Chinese do not view authoritarian parenting as negatively as Americans (9). Chao argues, that authoritarian parenting is based on Euro-American tradition, including the ideas of original sin and breaking the child's innate bad nature, and is inadequate as an explanation of Chinese parenting (38). She suggests that Chinese relationships are best understood by three essential aspects of Confucian thought: first, relationships define a person; second, relationships are hierarchical; and third, a harmonious society is dependent on individuals honoring their role in relationships. Two Chinese words "guan" and "chiao shun" more adequately describe Chinese parenting in this framework of Confucian thought. "Guan" means "to govern," "to care for," and "to love" therefore equating the governing or controlling aspects of parenting with care and love. "Chiao shun" or "training" involves modeling appropriate behavior, limiting exposure to inappropriate behavior, nurturing children when young, and driving children to achieve when they enter school. In the Chinese parent-child relationship, the parent is expected to govern, train, and discipline

the child (38). While Chinese parents encourage unquestioning obedience (consistent with authoritarian parenting style), they also show warmth, support and caring (more consistent with authoritative parenting).

To test her hypothesis, Chao sampled 50 Chinese mothers who immigrated to the United States as adults and 50 at least third generation European Americans mothers regarding their acceptance of controlling, authoritarian, and authoritative parenting practices (38). In addition, 13 questions were asked to determine if mothers adhered to the principle of "training." Chinese mothers were found to be significantly more controlling and authoritarian in their parenting, but not significantly different in authoritative parenting. Additionally, Chinese mothers adhered significantly more to 7 of the 13 training items: "parents must begin training a child as soon as ready," "mothers must train child to work very hard and be disciplined," "Mothers teach child by pointing out good behavior in others," "When child continues to disobey you, he/she deserves a spanking," "mothers primarily express love by helping child succeed especially in school," "Child should be in the constant care of their mothers or family," and "child should be allowed to sleep in mother's bed." Chinese mothers scored higher, though not significantly so, on 5 of the additional six items. Chao concluded that the idea of training is more accurate in understanding Chinese parenting strategies than the western concepts of authoritarian or authoritative parenting.

Additional studies have shown a correlation between harsh authoritarian parenting styles and decreased academic performance and increased aggression in Chinese children, seemingly contradicting Chao's idea of training (44). Nelson et al. confirmed this observation in 2006 in a survey of 215 children and their parents in Beijing regarding

childhood behavioral problems and parenting style (41). They found increased aggression with authoritarian parenting style, but also suggested that less severe authoritarian parenting might better be described according to Chao's training theory.

The role of a child can further be defined in the parent-child relationship by "filial piety." According to filial piety children are the property of their parents, the lowest level of the family hierarchy, and expected to submit and have unconditional obedience (8, 42). A filial child should revere, serve, and take good care of his or her parents (45). Filial behaviors include respecting, honoring, and promoting prestige of parents (46). To ensure filial piety in children, some have suggested that corporal punishment is a right and even a duty of parents (32, 47). Wong et al. report that Chinese parents use two techniques to ensure filial piety: first, they ensure physical and emotional closeness, and second, they use harsh discipline to maintain authority and obedience (36). Following the principles of "guan" and "chiao shun," parents teach and train with discipline, caring, and concern; filial children respect their parents' discipline and strive to honor them through their behavior.

China is experiencing unprecedented industrialization, economic growth, and, with growing availability of western media and resources, westernization. In addition, domestic policies promoting social changes in China (i.e. one-child policy, gender equality, urbanization, and communism) continue to exact changes on Chinese culture. These developments have changed "parenting values and beliefs about child development" (37). LaVine's models of parenting show hierarchical goals of parenting including survival, health, acquisition of economic capabilities, and the attainment of cultural values (43). With China's rapid development and stratification, the goals of

survival and health are being met, and some parents may use less of an authoritarian style and more of an authoritative style in parenting to obtain higher order goals. This has already been seen in the evolving role of fathers in parenting (40).

This Study

With approximately one fifth of the world's population, China is a country with incredible potential for research, prevention, and interventions on a high proportion of the world's at risk children. Though available information suggests high rates of child abuse in China, relatively few studies are available in the English literature. Chinese parents have traditionally been seen as strict, controlling, authoritarian parents but have also been shown to use authoritative parenting practices. Some have suggested that the western based authoritarian and authoritative practices do not adequately describe Chinese parenting and have suggested the alternative idea of training (38). Other culturally held beliefs such as filial piety have been used to help describe the parent child relationship. Given the differences in parenting practices and beliefs, it is relatively unclear what Chinese individuals view as culturally acceptable discipline and unacceptable discipline. Additionally, the knowledge of the causes and effects of abuse may not transfer from West to East and it is important for suspected child abuse to be evaluated within the context of each culture and based on the specific social and cultural environment in which it occurs (21).

In a guide titled *Preventing Child Maltreatment: a Guide to Taking Action and Generating Evidence,* the WHO and the international Society for the Prevention of Child Abuse and Neglect (ISPCAN) include suggested areas and methods for understanding, intervening, and preventing abuse (14). The Guide defines the ultimate objective as "a

world in which all countries routinely implement child maltreatment prevention programs based on sound epidemiological data and on local experimental studies of what is effective in prevention." As part of the Guide, they defined the role of service providers as "to provide care in order to minimize the consequences of the abuse or neglect that has occurred, and to determine what actions could prevent future maltreatment." The Guide further states that "early detection of child maltreatment and early intervention can help to minimize the likelihood of further violence and the long-term health and social consequences." With early detection and intervention in mind, WHO and ISPCAN call for training and educating "frontline" workers on the recognition of abuse and methods to intervene and prevent. Additionally they recommend that the development of evidence-based protective services should not replace preventative programs. "Perhaps the greatest problem is how to direct professionals to intervene where there are no functioning child welfare or protection services. Investment in the early detection of child maltreatment is only worthwhile if the detection will be followed up by action to help protect the child."

In a rapidly changing and developing country, Chinese training doctors, both medical students and residents, can provide insight into not only the culturally specific acceptability of discipline practices, but can give a deeper understanding of what practices training physicians and future health advocates see as needing intervention. Additionally, students and residents provide understanding about the current level of education on domestic violence in China and an understanding of what can been done to intervene. In contrast to Hesketh et al.'s study of pediatric health care providers and in light of the finding that younger health care workers are less accepting of physical discipline, this study seeks to understand the views of young training physicians in order

gain further insight into the evolving state of child abuse in China.

The purposes of the study are (1) to assess the attitudes of Chinese medical students and residents toward childhood disciplinary methods and to compare them to US medical students, and (2) to understand what Chinese medical students and residents would do if they encountered child abuse.

METHODS

Subjects

This cross-sectional study was conducted at Yale Medical School (Yale) in New Haven, Connecticut and Xiangya Medical School (Xiangya), Central South University, in Changsha, China in June 2010. The target populations included a class of 97 fourth year Xiangya medical students enrolled in an eight year program, 200 medical first year residents, representing all medical specialties, participating in a pilot residency program at Xiangya, and 99 second year Yale medical students. Medical students in both populations were finishing the last of their pre-clinical years and preparing to enter the hospital for their clinical training.

Subject Recruitment

Xiangya medical students were verbally invited to participate in the optional study. Xiangya residents were given a letter inviting them to participate in the enclosed questionnaires. Yale students were sent an email inviting them to participate in a voluntary online survey. Participants were guaranteed confidentiality and ensured that participation would in no way influence their standing in their respective programs.

Measures

All participants were asked to fill out a survey that included basic demographic information, information on the participants' caregiver during childhood, and a modified version of the Survey of Standards of Discipline (48). Demographic information included age, gender, nationality, racial/ethnic profile, marital status, number of siblings, number of children, and if they are from a rural or urban area. Caregiver information included questions on parent education, who the participants spent more time with as a young child (0-5 years) and school-age child (6+ years), and who was the primary disciplinarian in the home. Modifications to the Survey of Standards of Discipline were made based on common Chinese discipline techniques recommended by a group of domestic violence researchers at Xiangya. Thirty-seven discipline practices were assessed that can be divided into three categories: restrictive discipline, verbal discipline, and corporal discipline (Table 1). Each respondent was asked to mark each practice as:

1) Acceptable as discipline;

2) Sometimes acceptable as discipline;

3) Unacceptable as discipline;

4) Unacceptable as discipline and in need of intervention to protect the child.

Five additional questions were asked based on Orhon et al. 2006: 1) Is corporal punishment an effective way to change a child's behavior in the home? 2) Is corporal punishment an effective way to change a child's behavior at school? 3) Is beating an acceptable form of child discipline? 4) I was physically abused as a child? and 5) I was physically disciplined in school as a child? (49). Each participant was also asked if child abuse is a problem in his or her respective country.

A second survey was used to evaluate Chinese participants' opinions regarding

Table 1. List of 37 discipline practices included in the questionnaire by category.

Restrictive Discipline	Corporal Discipline
Take away privileges (e.g. watch TV, play video games, hang out with friends)	Spank bottom with an open hand lightly
Take away a toy	Spank bottom with an open hand leaving a red mark
Send to bed without supper	Spank bottom with an open hand leaving a bruise
Take away pocket money	Spank bottom with belt, stick, broom, or shoe lightly
Physically restrain, hold child still	Spank bottom with belt, stick, broom, or shoe leaving a red mark
Physically restrain, tie the child up	Spank bottom with belt, stick, broom, or shoe leaving a bruise
Stand in corner or against the wall	Slap face with an open hand lightly
Leave child alone without talking to them or recognizing their presence	Slap face with an open hand leaving a red mark
Lock in room for 15 minutes	Slap face with an open hand leaving a bruise
Lock in room for 1 hour	Squeeze or twist a limb producing pain
Lock in room all day or night	Squeeze/pinch an ear producing pain
Kneel on floor for 1 hour	Strike with fist leaving a bruise
Kneel on washboard or rough surface for 1 hour	Strike with chopsticks on head
	Strike with an object leaving a bruise
Verbal Discipline	Push child down or against a wall
Yell at child	Hit child's head against the wall
Call child names (e.g. stupid, worthless)	Kick leaving bruise
Threaten to abandon child	Burn leaving a mark
Threaten to hurt child	Hit and fracture ribs
	Hit and injure head, child unconscious

responsibility to report and intervene in cases of suspected child abuse. Participants were asked to report who they felt had a responsibility to intervene in cases of suspected abuse: family, neighbors, the government, the police, or health professionals. Participants were also asked to whom abuse should be reported: the police, the government, the abuser, the family, the Women's Federation, no one, or other. Participants were given room to

provide written comments or responses. The Women's Federation is a government-organized group throughout China that, though its primary responsibility is to women, has informally aided in the care of abused children (8). Additionally, participants were asked what they felt would be the consequences if abuse were reported to the police or an appendage of the government: things would improve for the child, nothing, things would continue unchanged, and things would get worse for the child.

Data Analysis

Frequencies were determined for all responses based according to the three groups: Xiangya students, Xiangya residents, and Yale students. For the purposes of data analysis of the 37 discipline practices, two new collapsed categories were made: acceptable (acceptable and sometimes acceptable) and unacceptable (unacceptable and unacceptable needs intervention). Additionally, rates of unacceptable needs intervention as a percentage of the overall unacceptable category (unacceptable and unacceptable needs intervention) were compared. Two statistical comparisons were made, one between Xiangya and Yale medical students, and one between Xiangya medical students and residents. Responses were analyzed and compared using Pearson Chi-square asymptotic for questions with more than 5 responses in each category and Fisher's Exact Test, exact two sided for questions with less than 5 responses in a category. A p-value of < 0.05 was used to test for significance.

IRB Approval

This project was determined to be exempt from Human Investigation Committee (HIC) review at Yale and was approved by the Xiangya IRB (see appendix A).

Personal Role

Under the direction and support of Dr. Andrea Asnes, with suggestions from Dr. John Leventhal, and in collaboration with Dr. Cao Yuping, I designed, sought approval, and carried out the survey at Xiangya and Yale. Data analysis was carried out with the assistance of Jesse Reynolds at Yale-Griffin Prevention Research Center.

Results

Participants

Ninety-four out of 97 Xiangya students, 154 out of 200 Xiangya residents, and 63 out of 99 Yale students invited to participate finished the survey. An additional 5 Yale students started but did not complete the survey. Table 2 shows the demographic characteristics of each of the 3 groups. Mean ages of participants were 22.0, 27.0, and 24.8 for the Xiangya students, Xiangya residents, and Yale students, respectively. Xiangya residents had the highest proportion of male respondents (58.6%), followed by Xiangya students (55.3%), and Yale students (42.6%). No Xiangya students were married, while 8.8% of Yale students and 23.7% of Xiangya residents were married. Xiangya residents were the only group to have children (11.8%). Yale students were more likely to have siblings (88.2%) than Xiangya students (47.9%) or residents (61.4%). Yale students' mothers and fathers were more likely to be college graduates (89.5% and 89.7% respectively) than Xiangya students (16.0% and 22.4%) or residents (12.7% and 16.4%). Table 3 shows additional information on the primary childhood caregiver of the groups from 0-5 years of age and 6+ years of age. Additionally, it shows who the primary disciplinarian was in each participant's household.

Table 2. Sociodemographic characteristics of all study groups.

	Yale Students (n=68)	Xiangya Students (n=94)	Xiangya Residents (n=154)
	Mean (Standard Deviation)	Mean (Standard Deviation)	Mean (Standard Deviation)
Age	24.8 (1.7)	22.0 (0.9)	27.0 (3.4)
	Percent	Percent	Percent
Gender			
Male	42.6%	55.3%	58.6%
Urban or Rural			
Urban	79.4%	67.7%	49.0%
Married			
Yes	8.8%	0.0%	23.7%
Children			
0	100.0%	100.0%	88.2%
1			11.8%
Siblings			
0	11.8%	52.1%	38.6%
1	38.2%	36.2%	39.9%
2	32.4%	9.6%	15.7%
3	8.8%	1.1%	3.9%
4+	8.8%	1.1%	2.0%
Maternal Education			
High School	3.0%	61.7%	68.7%
Some College/vocational school	6.0%	22.3%	12.7%
College Graduate	32.8%	11.7%	6.7%
Advanced Degree	56.7%	4.3%	6.0%
Other	1.5%	0.0%	6.0%
Paternal Education			
High School	2.9%	59.6%	59.5%
Some College/vocational school	5.9%	18.1%	21.6%
College Graduate	22.1%	16.0%	9.2%
Advanced Degree	67.6%	6.4%	7.2%
Other	1.5%	0.0%	2.6%

Comparison of Xiangya and Yale Medical Student Attitudes on Discipline Practices

Of the 37 discipline practices, Yale and Xiangya students significantly differed on

Table 3. Primary Caregiver and Disciplinarian

	Yale Students (n=68)	Xiangya Students (n=94)	Xiangya Residents (n=154)
Who did you spend more time with as a young child (0-5 years)?			
Parents	91.2%	66.0%	71.9%
Grandparents	4.4%	31.9%	23.5%
Other caregiver	4.4%	2.1%	4.6%
Who did you spend more time with as a school-age child (6+ years)?			
Parents	95.6%	87.2%	85.1%
Grandparents	1.5%	6.4%	12.3%
Other caregivers	2.9%	6.4%	2.6%
Who were the major disciplinarians in your home?			
Mother	95.6%	55.3%	44.2%
Father	80.9%	47.9%	46.1%
Grandmother	1.5%	1.1%	1.9%
Grandfather	0.0%	1.1%	1.9%
Another Care Provider	5.9%	11.7%	11.0%

the acceptability of 13 practices: Take away privileges (e.g. watch TV, play video games, hang out with friends); take away a toy; yell at child; call child names (e.g. stupid, worthless); physically restrain, hold child still; spank bottom with an open hand lightly; spank bottom with an open hand leaving a red mark; spank bottom with belt, stick, broom, or shoe lightly; spank bottom with belt, stick, broom, or shoe leaving a red mark; squeeze or twist a limb producing pain; squeeze/pinch an ear producing pain; strike with chopsticks on head; and push child down or against a wall. Of the statistically significant discipline practices, a greater percentage of Xiangya students found the restrictive and verbal discipline techniques to be unacceptable than Yale students except for calling a child names (Fig. 1). Nearly ten percent of Xiangya students found taking away privileges as unacceptable and 17.0% felt taking away a toy was unacceptable compared

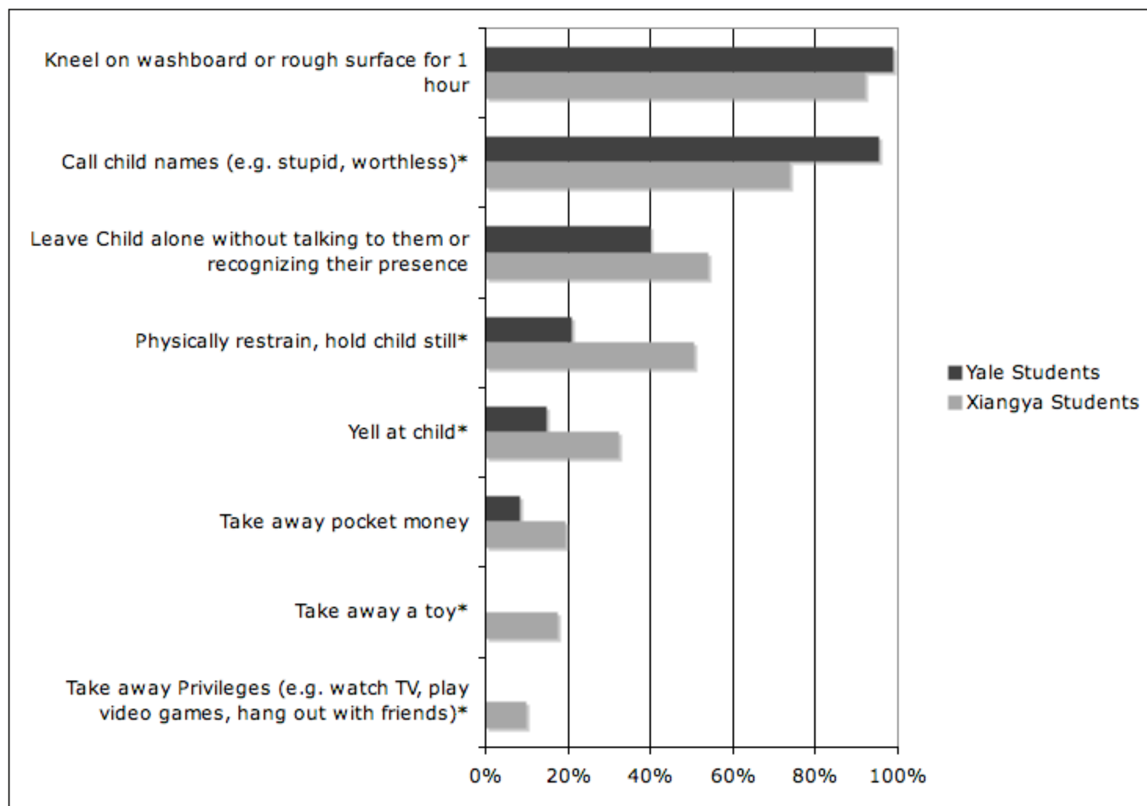

Figure 1. Unacceptability of Verbal and Restrictive Discipline Practices between Yale and Xiangya Medical Students. For all shown discipline techniques p<0.1.
* p<0.05

to 0.0% of Yale students (p=0.011 and p<0.001 respectively). Fifty percent of Xiangya students and 20.6% of Yale students found physically restraining a child by holding him/her still was unacceptable (p<0.001). Yale students were more likely to find calling a child names unacceptable than Xiangya students (95.2% and 73.4 respectively, p<0.001). Yelling at a child was found to be unacceptable by 31.9% of Xiangya students and 14.3% of Yale students (p=0.012).

All of the significantly different corporal discipline practices were found by a greater percentage of Xiangya students to be acceptable (Fig. 2). Spanking with an open hand lightly was acceptable to 96.8% of Xiangya students compared to 68.3% of Yale students (p<0.001). Spanking with an open hand and leaving a red mark was acceptable

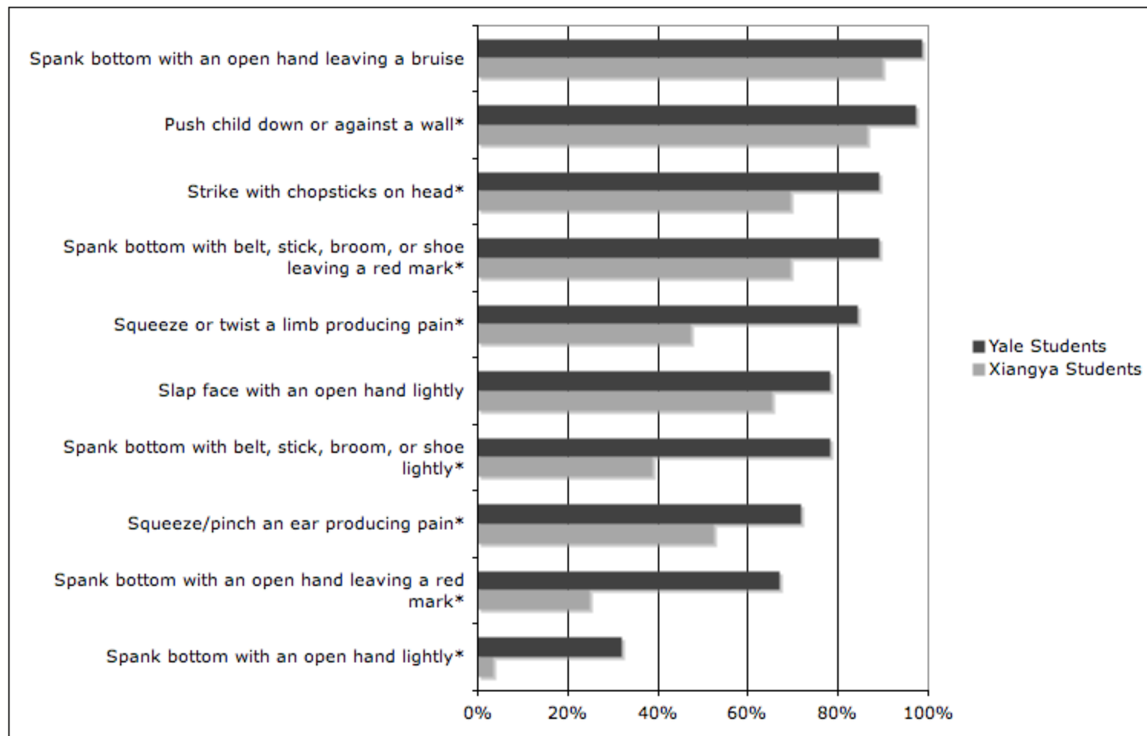

Figure 2. Unacceptability of Corporal Discipline Practices between Yale and Xiangya Medical Students. For all shown discipline techniques p<0.1.
* p<0.05

to 75.5% and 33.3% of Xiangya and Yale students respectively (p<0.001). Though not statistically significant, spanking with an open hand and leaving a bruise also approached statistical significance (acceptable to 10.6% of Xiangya students and 1.6% of Yale students, p=0.051). Spanking with a belt or other implement was also significantly more acceptable to Xiangya students with 61.7% finding it acceptable when done lightly and 30.9% when only leaving a red mark compared to 22.2% and 11.1% of Yale students, respectively (p<0.001, p=0.004). Spanking using an implement and leaving a bruise was equally unacceptable (Xiangya students 97.9%, Yale students 100%; p=0.516). No significant difference was found between the acceptability of slapping a child's face lightly, leaving a red mark, and leaving a bruise between Xiangya (35.1%, 11.7%, and 1.1%) and Yale (22.2%, 4.8%, and 0.0%) students, though slapping lightly approached

statistical significance (p=0.084, p=0.162, p=1.000 respectively). Squeezing/twisting a limb or squeezing/pinching an ear to produce pain was acceptable to 53.2% and 47.9% of Xiangya students and 15.9% and 28.6% of Yale students (p<0.001, p=0.016). Thirty-one percent of Xiangya students found striking the head of a child with chopsticks as acceptable compared to 11.1% of Yale students (p=0.004). Pushing a child down or against a wall was acceptable to 13.8% of Xiangya students and 3.2% of Yale students (p=0.028).

Of the 17 restrictive and verbal discipline practices, 12 were not significantly different. Both Xiangya and Yale students found sending a child to bed without supper to be unacceptable (91.5% and 84.1%, p=0.156). Threatening to abandon or hurt a child was found by most student respondents to be unacceptable (Xiangya students 94.7% and 94.7% respectively, and Yale students 96.8% and 88.9% respectively; p=0.703 and p=0.181). Though largely acceptable by both groups, 17.2% of Xiangya students and 9.5% of Yale students found disciplining a child by having them stand in a corner or against a wall as unacceptable (p=0.176). Similar rates of acceptability were found between the two groups for locking a child in his/her room for 15 minutes, 1 hour, and all day or night (Xiangya students 72.0%, 44.1% and 5.3%; Yale students 63.5%, 47.6%, and 11.1%; p=0.259, p=0.664, and p=0.181). The acceptability of three practices approached statistical significance: taking away pocket money (80.9% of Xiangya and 92.1% of Yale students, p=0.051), leaving a child alone without talking to them or recognizing their presence (46.2% of Xiangya and 60.3% of Yale students, p=0.084), and kneeling on a washboard or other rough surface for 1 hour (8.5% of Xiangya and 1.6% of Yale students, p=0.086).

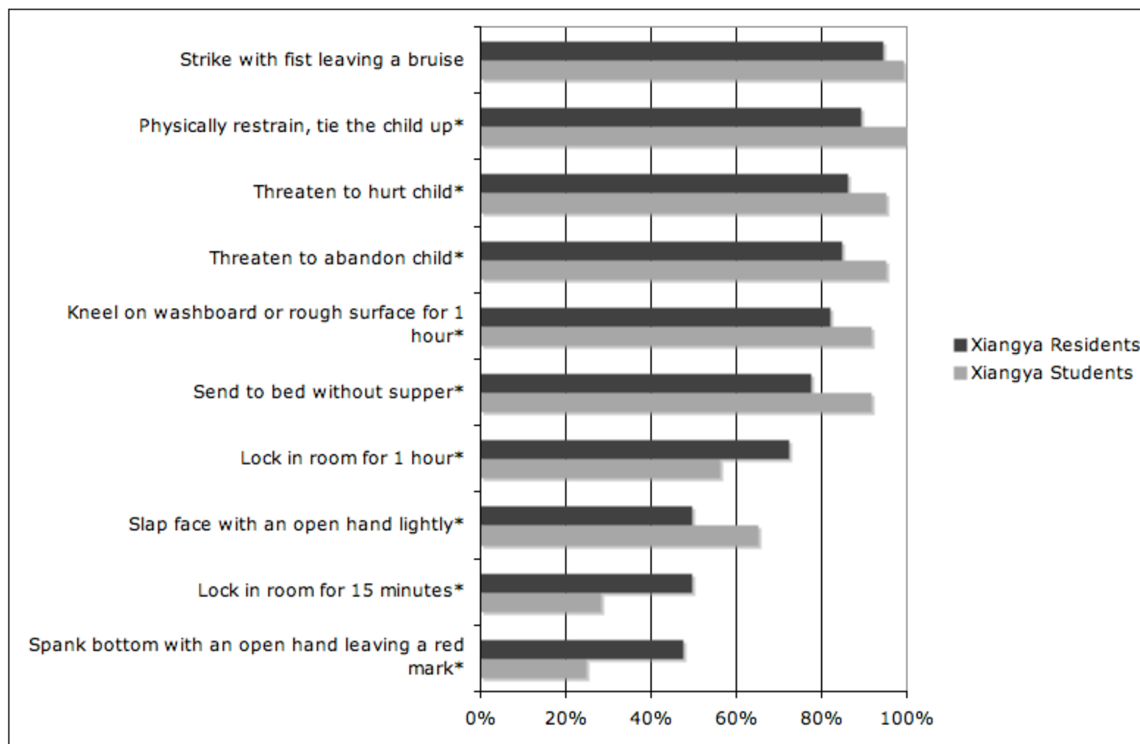

Figure 3. Unacceptability of All Discipline Practices between Xiangya Medical Students and Residents. For all shown discipline techniques $p<0.1$.
* $p<0.05$

Severe corporal discipline was found by both groups to be unacceptable. Less than 3% of respondents in both groups found bruising a child (by spanking with an implement, slapping, striking with a fist or an object, or kicking), hitting a child's head against a wall, burning a child leaving a mark, fracturing a child's ribs, and hitting and injuring a child's head leaving the child unconscious as acceptable.

While for more serious discipline both groups had similar rates of perceiving the behavior as unacceptable, there were significant differences in what each group perceived as necessitating intervention.

Comparison of Xiangya Students and Residents Attitudes on Discipline Practices

Nine out of the 37 discipline practices were significantly different between Xiangya students and residents (Fig. 3): two verbal discipline practices (threatening to

abandon the child and threatening to hurt the child); five restrictive discipline practices (sending to bed without supper, physically restraining the child by tying the child up, locking the child in a room for 15 minutes, locking the child in a room for 1 hour, and forcing the child to kneel on a washboard or other rough surface for 1 hour); and two corporal discipline practices (spanking the child's bottom with an open hand leaving a red mark and slapping a child's face lightly with an open hand). Significantly more residents than students found both threatening to abandon a child and threatening to hurt a child as acceptable (15.6% and 14.3% compared to 5.3% and 5.3% respectively; p=0.015 and p=0.028). More residents than students also found sending a child to bed without supper, physically restraining a child by tying them up, and forcing them to kneel on a rough surface for an hour as acceptable (22.7%, 11.0%, and 18.2% compared to 8.5%, 0.0%, and 8.5% respectively; p=0.004, p<0.001, and p=0.036). Students were significantly more likely to find locking a child in a room for 15 minutes or 1 hour to be acceptable than residents (72% and 44.1% compared to 50.6% and 27.9% respectively; p=0.001 and p=0.009). Spanking a child's bottom with an open hand leaving a red mark was acceptable to 75.5% of Xiangya students compared to 52.6% of residents (p<0.001). Slapping a child's face with an open hand lightly was acceptable to more residents than students (50.6% and 35.1% respectively, p=0.017).

Unacceptable Compared to Unacceptable Needs Intervention

Fifteen of the 37 discipline practices differed significantly regarding the need to intervene as a percentage of overall unacceptable responses between Yale students and Xiangya students (Figure 4). Of the significantly different responses, with one exception (send to bed without supper), Yale students were more likely to mark a practice as in

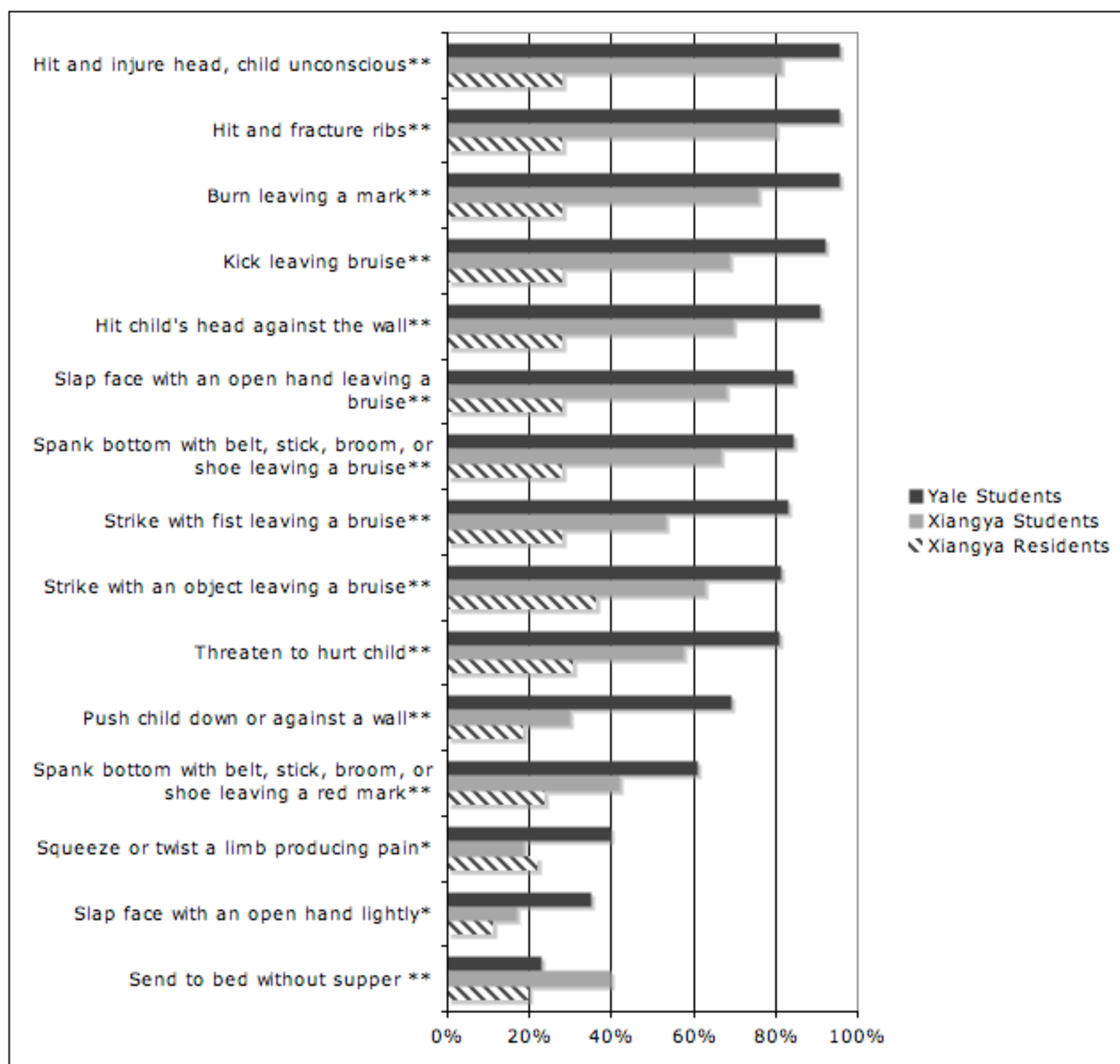

Figure 4. Percent Unacceptable Needs Intervention of Overall Unacceptable Responses for Xiangya Students and Residents and Yale Students.
* p<0.05 for Xiangya Student and Yale Student Comparison only
** p<0.05 for both Xiangya Student and Yale Student Comparison and Xiangya Student and Resident Comparison

need of intervention to protect the child. Only 1 verbal discipline and 1 restrictive discipline practice were significantly different (threaten to hurt the child and send to bed without supper respectively). Striking with a fist leaving a bruise was found to be in need of intervention by 82.5% of Yale students compared to 52.7% of Xiangya students (p<0.001). Pushing a child down or against a wall was found to be in need of intervention

by 68.9% of Yale students compared to 29.6% of Xiangya students (p<0.001). Even the most severe discipline practices such as hitting and injuring a child's head leaving the child unconscious was significantly different (95.2% of Yale students felt it was in need of intervention compared to 80.9% of Xiangya students; p=0.009).

Twenty-two of the 37 discipline practices differed significantly regarding the need to intervene as a percentage of overall unacceptable responses between Xiangya students and residents (Figure 4). All of the significantly different responses were found by a higher percentage of Xiangya students than residents to be in need of intervention. A relatively high percentage of Xiangya residents found even the most severe discipline practices as unacceptable but not in need of intervention (e.g. hitting and injuring a child's head leaving the child unconscious was unacceptable but not in need of intervention by 55.6% of Xiangya respondents that marked it as unacceptable compared to 19.1% of Xiangya students; p<0.001).

Perceived Effectiveness of Corporal Punishment

Significant differences were also found between Yale and Xiangya students and Xiangya students and residents regarding the effectiveness of corporal punishment, personal history of corporal punishment in school, and personal history of abuse (Fig. 5). Corporal punishment was felt to be an effective way to change a child's behavior in the home by 56.4% of Xiangya students compared to 22.2% of Yale students and 28.6% of Xiangya residents (p<0.001 and p<0.001 respectively). Corporal punishment at school was felt to be effective by 26.6% of Xiangya students compared to 4.8% of Yale students and 22.7% of Xiangya residents (p<0.001 and p=0.490 respectively). Forty percent of Xiangya students found beating as an acceptable form of child discipline compared to

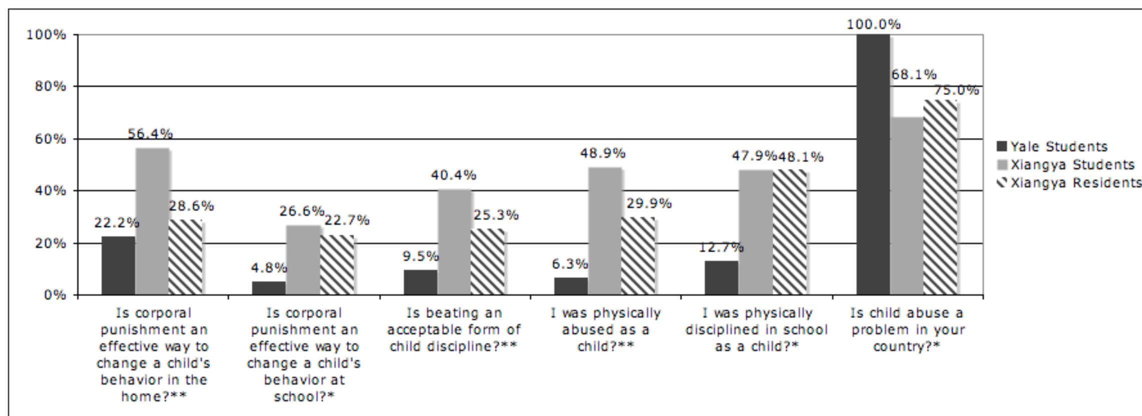

Figure 5. Affirmative Responses to 6 Additional Questions.
* p<0.05 for Xiangya Student and Yale Student Comparison only
** p<0.05 for both Xiangya Student and Yale Student Comparison and Xiangya Student and Resident Comparison

9.5% of Yale students and 25.3% of Xiangya residents (p<0.001 and p=0.013).

Personal History of Discipline/Abuse

Xiangya students and residents reported high rates of corporal discipline in school (47.9% and 48.1% respectively) compared to Yale students (12.7%; student comparison p<0.001; Fig. 5). Rates of being physically abused as a child differed significantly between all groups with Xiangya students reporting the highest rate (48.9%), followed by Xiangya residents (29.9%), and Yale students (6.3%; student comparison p<0.001 and Xiangya student resident comparison p=0.003).

Perception of Child Abuse as a National Problem

One hundred percent of Yale students felt that child abuse is a problem in the United States compared to 68.1% of Xiangya students and 75.2% of Xiangya residents that felt that child abuse is a problem in China (p<0.001 for comparison between Yale and Xiangya students and p=0.241 for the comparison between Xiangya students and residents).

Educational Exposure to Domestic Violence

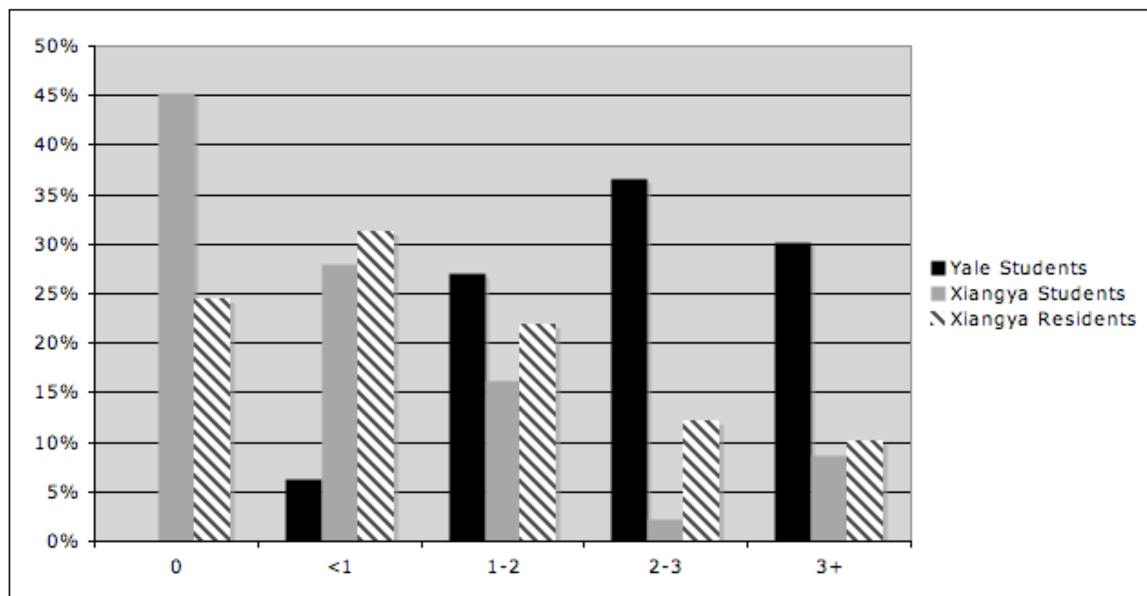

Figure 6. Hours Devoted to Domestic Violence for the 3 Study Groups. Y-axis is the percent of responses for each hour category. X-axis is hours of study devoted to domestic violence. For the comparison between Xiangya and Yale students, p<0.001. For the comparison between Xiangya students and residents, p=0.003.

Yale students reported significantly more hours of educations devoted to domestic violence and research than Xiangya students (Fig 6). More than 93% of Yale students reported more than one hour of education devoted to the problem with 66.7% reporting at least two hours. More than 73% of Xiangya students reported less than one hour with 45.2% of those reporting no time devoted to domestic violence (p<0.001). Xiangya residents reported significantly more time devoted to domestic violence than students with 44.2% reporting more than 1 hour (p=0.003).

Reporting Abuse

When asked who has the responsibility to intervene or report cases of child abuse, 85.1% of Xiangya students and 83.1% of residents marked the family. Lower percentages of Xiangya students and residents also indicated the police, the government, neighbors and health professionals (Fig. 7). When asked to whom abuse should be reported, the

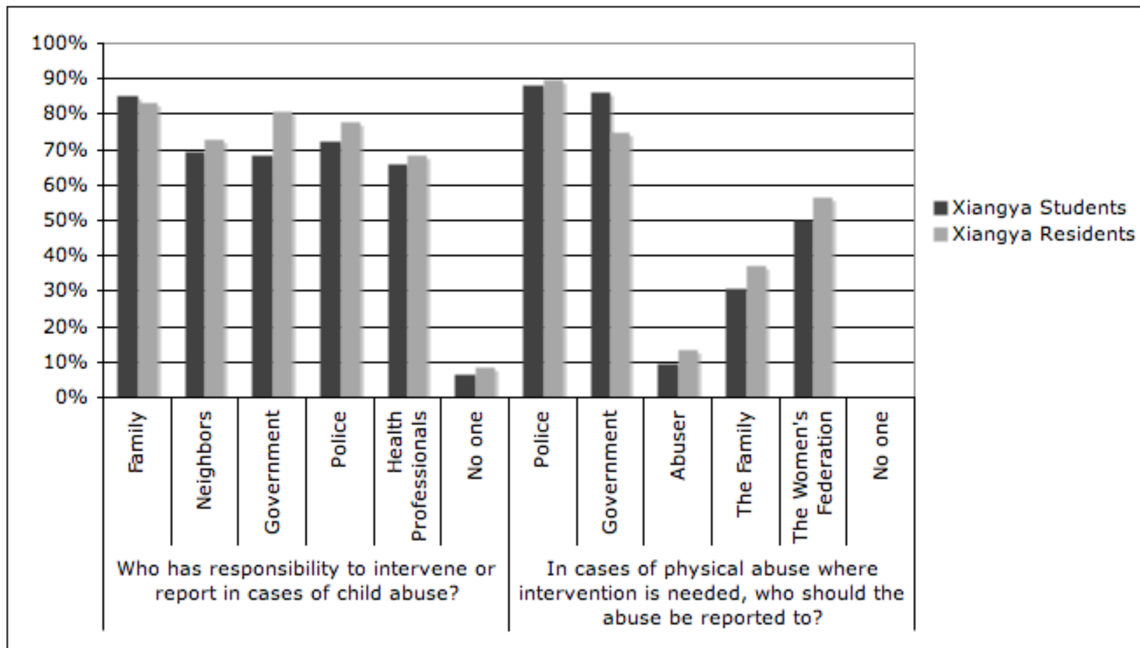

Figure 7. Xiangya Students and Residents Responses to Who has Responsibility to Intervene in Cases of Abuse, and to Whom abuse Should be Reported. There is no significant difference between Xiangya student and resident responses.

most frequently marked group was the police followed by the government and the Women's Federation. In addition students and residents were given room to write in additional groups that abuse should be reported to. Three individuals indicated that abuse should be reported to the media, 3 reported to the street committee, and 4 stated other women's, children, or public welfare committees or agencies. Fifty-seven percent of students and 68.8% of residents indicated that things would improve for the child if abuse were reported to the police or an appendage of the government.

DISCUSSION

This study highlights the differences in acceptable discipline practices between Chinese and American medical students and Chinese residents. As samples were taken from one US medical school (Yale) and one Chinese medical school (Xiangya) these data

are not generalizable. However, given the role that health care providers can and should play in diagnosing and reporting abuse, this study provides valuable information on what discipline practices doctors perceive as acceptable and unacceptable. Additionally, it provides clues to how abuse and appropriate child discipline are culturally defined.

Differences in Acceptable Discipline Practices between Sample Groups

In general Xiangya students found restrictive discipline to be less acceptable, corporal discipline to be more acceptable, and certain verbal discipline practices to be more or less acceptable than Yale students. Xiangya students found calling a child names more acceptable than Yale students and yelling at a child less acceptable than Yale students. These differences in acceptability likely reflect the normativeness of the behavior. Higher levels of acceptance of physical discipline are consistent with previous studies that have shown higher levels of authoritarian parenting among Chinese (9, 38, 42, 43). Acceptance by young adults also supports Chao's hypothesis that these discipline techniques might be viewed as parental concern (38). Corporal punishment was viewed as an effective way to change child's behavior at home by 56% of Xiangya students compared to 22.2% of Yale students, indicating not only acceptance as a discipline practice, but belief in its effectiveness to train and teach a child proper behavior.

A greater proportion of Xiangya residents found two verbal discipline practices (threatening to abandon or hurt a child), one corporal discipline practice (slapping a child's face with an open hand lightly), and three restrictive discipline practices (sending a child to bed without supper, kneeling on a rough surface for an hour, and physically restraining a child by tying the child up) as acceptable when compared to Xiangya students. However, fewer residents found another corporal discipline practice (spanking a

child's bottom with an open hand and leaving a red mark) and two other restrictive discipline practices (locking a child in a room for 15 minutes or 1 hour) as acceptable. Although an initial study hypothesis included that increased clinical exposure would cause residents to be less accepting of discipline practices when compared to medical students, this does not seem to be the case. Differences in acceptability might be better understood by socio-demographic differences. Xiangya student participants were all part of a prestigious 8 year M.D./Ph.D. program that required very high Gao Kao (the national college entrance exam) scores. Residents were generally from bachelor or master medical degree programs that were not as competitive. Additionally, residents were on average older than students (27 compared to 22) and older age has been previously shown to correlate with increased approval of physical discipline in health care providers (8, 29). Xiangya residents were also more likely to be married, have siblings, and have children. Xiangya residents were also more frequently from rural areas than students (51.0% compared to 32.3%). Xiangya students, given their socio-demographic characteristics, might be more idealistic than residents and therefore less accepting of certain discipline practices. This study shows some differences, but does not provide enough information to understand the cause of this difference. Further studies are needed to see if this is a true relationship and what might be the cause.

Contrasts between Xiangya Students and Residents Attitudes and Previous Studies

Several noteworthy differences exist between this study and the Hesketh et al.'s survey of Chinese health care providers (8). Only 3% of respondents in Hesketh et al.'s survey approved of the use of an implement in discipline. However, 61.7% of Xiangya students and 58.4% of residents found using a belt, stick, broom or shoe to spank a

child's bottom lightly to be acceptable. Thirty-one percent of students and 26.6% of residents found using a belt, stick, broom or shoe to spank a child's bottom leaving a red mark as acceptable. Additionally, 30.9% of students and 28.6% of residents found striking a child's head with chopsticks as acceptable. Forty-seven percent of Hesketh et al.'s sample reported smacking a child's bottom as acceptable compared to 96.8% of students and 94.2% of residents that found spanking done lightly to be acceptable, 75.5% of students and 52.6% of residents that found spanking leaving a red mark to be acceptable. Hesketh et al. also found that 24% of health professionals supported physical punishment while this study found 56.4% of Xiangya students and 28.6% of residents found corporal punishment to be effective and 40.4% of students and 25.3% of residents found beating to be acceptable. It is important to note the differences in methodology that may contribute to some of these differences. Hesketh et al. asked open-ended questions of what was acceptable discipline and what participants considered abuse compared to this study, which listed 37 discipline practices and asked about the acceptability of each. Additionally, the target population of Hesketh et al.'s study was specifically health care providers (not trainees) who worked primarily with a pediatric population. However, these differences between the two studies indicate that with specific discipline modalities (e.g. using an implement or spanking), though in general they may be considered unacceptable as shown by Hesketh et al., the result of the discipline may significantly alter the perception of the practice.

Contrasts between Yale Student Attitudes and Previous Studies

Multiple differences exist between Yale student responses in this study and a survey by Morris et al. of Pediatricians and Family Practitioners in 1985 (48). Morris et

al.'s study asked participants to mark 23 discipline practices as acceptable, unacceptable, or reportable as abuse. In general, Yale students were more likely to find corporal discipline practices to be unacceptable than Pediatricians and Family Practitioners in 1985. Ten percent of practitioners in 1985 found spanking with an open hand lightly to be unacceptable compared to 31.8% of Yale students. Spanking a child and leaving a red mark was seen by 45% of practitioners and 66.6% of Yale students as unacceptable with 1% and 19% respectively finding it reportable or in need of intervention. Spanking and leaving a bruise was viewed by similar percentages of participants as unacceptable (86% of practitioners and 98.4% of students) but very different rates of reporting and intervention (25% and 61.9% respectively). Restrictive discipline practices were more variable on which group was more likely to find it unacceptable. Thirty-seven percent of practitioners found sending a child to bed without supper to be unacceptable compared to 84.1% of Yale Students with 5% of practitioners stating that they would report it as abuse and 19% of Yale students stating it was in need of intervention. Locking a child in a room has the opposite trend with 38% of practitioners finding it unacceptable for 15 minutes, 67% for 1 hour, and 98% for all day or night compared to 36.5%, 52.4%, and 88.9% respectively for Yale students. Locking a child in their room for all day or night was also viewed by fewer Yale students to need intervention (52.4% compared to 82% of practitioners). While the participants from the two studies are made up of different, not necessarily comparable, groups within the health care setting, this research suggests that perceptions regarding acceptable discipline have changed over the past 25 years. Corporal discipline in the United States appears to be less acceptable while some restrictive practices appear to be more acceptable. The increase in acceptability of

restrictive activities, such as locking a child in a room for varying amounts of time, is likely due to a shift in discipline practices from corporal discipline to more restrictive discipline practices. With increased use of restrictive practices and subsequent increased perceived normativeness, restrictive discipline may be more acceptable.

Differences in Intervention/Reporting Thresholds between Study Groups

For most corporal discipline practices, Yale students were most likely to mark the practices as in need of intervention with Xiangya students the second most likely and Xiangya residents the least likely. Multiple factors are possibly contributing to this trend. In China there are no mandatory reporting laws and only 66% of students and 68% of residents felt that medical professionals have a responsibility to intervene or report. There is also no clear organization or governmental group overseeing child welfare. This is evident by the diverse and frequent responses to the question regarding whom abuse should be reported to (the police, an appendage of the government, the Women's Federation, and the family). The role of filial piety and the role of the parent in training their children likely also play a role. Parents are seen as unquestionable authority figures who act in the best interest of their children, and though their discipline may seem overly harsh to some it is likely coupled with increased love and concern. Reporting abuse may also be seen as a disgrace to the family, as the issue is something private that should best be taken care of within the home. Of the 10 free response answers to whom abuse should be reported, 3 reported the media likely representing that the shame caused by public humiliation would be an adequate deterrent.

Xiangya Students and Residents Attitudes Regarding Reporting Abuse

The majority of Xiangya students and residents reported that abuse should be

reported to the police (88.3% and 89.6%) and the government (86.2% and 74.7%). Three respondents indicated that the "street committee" should be informed of cases of abuse. The street committee is the smallest unit of government in many Chinese providences. It is often made up of an older couple, or a couple of older women who are responsible for resolving conflicts in small geographical areas of cities. Hesketh et al. reported that health professionals are unlikely to report abuse to police if legal action and potential incarceration are the outcomes and recommended that "lawyers, law enforcement agencies and policy makers" as well as the general public be included in finding an appropriate non-legal mechanism of reporting abuse (8). The street committee may be able to help fit that role if properly educated and equipped to recognize and intervene in cases of abuse.

Fifty percent of Xiangya students and 56.5% of residents also indicated that abuse should be reported to the Women's Federation. Multiple respondents also mentioned the Women's Federation/Association in Hesketh et al.'s survey of pediatric health providers. Hesketh et al. described the Women's Federation as a "powerful government organized body with representation down to the village level throughout China." Though child abuse is not one of the principal roles of the organization, the Women's Federation has supported families where abuse has occurred (8). Policy makers could help to make this relationship more formal and promote health care workers and other groups to report/refer cases of suspected abuse.

Comparison of Personal History of Discipline/Abuse

Reported rates of abuse were higher than anticipated for Xiangya students and residents (48.9% and 29.9% respectively) and lower than anticipated for Yale students

(6.3%). Previous rates of child maltreatment have been reported between 40% and 62.4% in China (36). It is unclear why there is such a large difference between Xiangya students and residents. It is possible that due to socio-demographic differences, students have a lower threshold for defining abuse as discussed above. In addition, other researchers have noted that Chinese parents demand high academic performance (38). As Xiangya students are part of such a prestigious program in one of the top medical schools in China, it is possible that their parents were very demanding and strict regarding academic success and the reported difference between students and residents to some extent may be an actual difference. A U-shaped association has been found between child abuse in China and parental education levels, with both low and high levels of parental education associated with increased risk of abuse (50). This does not seem to reflect the differences in abuse between residents and students as both groups have similar parental education distribution. Overall, the higher than expected rates of abuse might also reflect the changing views on discipline practices and parenting in China, with students and residents viewing discipline that they experienced as children as abusive, though their parents might have seen it as appropriate parenting.

Views of Abuse as a National Problem

Given the high reported rates of personally experiencing child abuse by Xiangya students and residents, it is surprising that 31.9% of students and 24% of residents reported that child abuse is not a problem in China. In contrast, Yale students reported relatively little abuse and 100% of respondents indicated that abuse is a problem in the United States. This difference may, in part, be related to the amount of class time devoted to learning about abuse. More than 93% of Yale students reported more than one hour

devoted to abuse compared to 26.9% of Xiangya students and 44.2% of Xiangya residents. While there has been a push to understand, diagnosis and intervene in cases of child abuse in the United States among health care providers, relatively little has been done in China. Hesketh et al. reported that 85% of pediatric health care workers in China did not even consider abuse when they treated an injured child (8).

Limitations

This study has several limitations. While one of the primary objectives was to understand how training doctors view child discipline, subjects were from only one medical school in China and one medical school in the United States. Students from Xiangya medical school are part of a prestigious 8-year program, and may not be representative of medical students in more traditional 5-year or 7-year programs at Xiangya or across the country. While the majority of students were from the central region of China, there were medical students from all regions. Residents at Xiangya were graduates of 5 or 7-year programs and it is unclear if their responses differ from Xiangya students based on their schooling background, clinical experience, or socio-demographic characteristics. Although this study documents what some future doctors view as acceptable child discipline or unacceptable, it is unclear how this translates into how these future doctors define abuse. It is unclear if respondents would classify abuse based on an action being unacceptable in general, unacceptable and in need of intervention, or some other unknown classification. Regarding questions asked of Chinese students and residents regarding reporting abuse, questions were all multiple choice with the possibility of marking multiple answers and writing additional comments. This type of question is less ideal in this circumstance as respondents, by not marking a response, are

consciously indicating who should not intervene/report or to whom abuse should not be reported. This is not ideal, and likely overestimates whom students and residents see as having a responsibility to intervene and whom they feel abuse should be reported to.

Conclusions

In conclusion, this study both builds on Hesketh et al.'s study of pediatric health care providers by describing how current students and training doctors view discipline practices, as well as identifies differences between the acceptability of discipline practices between US and Chinese medical students and between Chinese students and residents. This highlights the difficulty in a universal diagnosis of abuse as cultures view different practices as more or less acceptable. Additionally, within cultural groups differences exist based on socio-demographic characteristics as seen with the comparison between Chinese students and residents. Future health care providers, though possibly more familiar with long and short-term consequences of discipline and trauma, also significantly differ on what they view as needing intervention to protect a child.

Despite Chinese students and residents reporting significantly higher rate of physical abuse and physical discipline in school, they are less likely to recognize abuse as a problem in their country. Chinese students and residents also receive less education regarding domestic violence and abuse. Continued research and increased education would help future doctors to accurately understand the nature of the problem in China, and provide them with the skills they need to recognize child abuse. Chinese subjects also recognize diffuse individuals and groups as having responsibility to intervene in/report cases of child abuse and diffuse individuals and groups to whom abuse should be reported. This likely represents the larger problem of having an adequate infrastructure in

place and appropriate education regarding the infrastructure to address abuse. As previously quoted, the WHO and ISPCAN have stated that "perhaps the greatest problem is how to direct professionals to intervene where there are no functioning child welfare or protection services. Investment in the early detection of child maltreatment is only worthwhile if the detection will be followed up by action to help protect the child." Given the high reported rates of child abuse by this and other studies, recognition of abuse as a national problem to be solved within and outside of the family and subsequent development of a child welfare system is essential for the protection of Chinese children.

References

1. Kempe, C.H., Silverman, F.N., Steele, B.F., Droegemueller, W., and Silver, H.K. 1962. The battered-child syndrome. *JAMA* 181:17-24.
2. DePanfilis, D., and Salus, M.K. 2003. Child Protective Services: A Guide for Caseworkers. Office on Child Abuse and Neglect (DHHS), editor. Washington, DC.
3. Krug, E.G., Dahlberg, L.L., Mercy, J.A., Zwi, A.B., and Lozano, R. 2002. World report on violence and health. Geneva: World Health Organization (WHO).
4. 1999. Report of the Consultation on Child Abuse Prevention. Geneva: World Health Organization (WHO).
5. Finkelhor, D., and Korbin, J. 1988. Child abuse as an international issue. *Child Abuse and Neglect* 12:3-23.
6. Korbin, J.E. 1991. Cross-Cultural Perspectives and Research Directions for the 21st Century. *Child Abuse and Neglect* 15:67-78.
7. Forjuoh, S.N., and Zwi, A.B. 1998. Violence against children and adolescents. International perspectives. *Pediatr Clin North Am* 45:415-426.
8. Hesketh, T., Hong, Z.S., and Lynch, M.A. 2000. Child abuse in China: the views and experiences of child health professionals. *Child Abuse and Neglect* 24:867-872.
9. Collier, A.F., McClure, F.H., Collier, J., Otto, C., and Polloi, A. 1999. Culture-specific views of child maltreatment and parenting styles in a Pacific-Island community. *Child Abuse Negl* 23:229-244.
10. Schultz, R.F. 1995. Child abuse in Fiji: a hidden problem. *Pacific Health Dialog* 2:31-36.
11. Maitra, B. 1996. Child abuse: a universal 'diagnostic' category? The implication of culture in definition and assessment. *Int J Soc Psychiatry* 42:287-304.
12. Elliott, J.M., Tong, C.K., and Tan, P.M. 1997. Attitudes of the Singapore public to actions suggesting child abuse. *Child Abuse and Neglect* 21:445-464.
13. Durrant, J.E. 2008. Physical punishment, culture, and rights: current issues for professionals. *J Dev Behav Pediatr* 29:55-66.
14. The World Health Organization and the International Society for Prevention of Child Abuse and Neglect. 2006. Preventing Child Maltreatment: a guide to taking action and generating evidence. Geneva: World Health Organization (WHO).
15. Pinheiro, P.S. 2006. Report of the independent expert for the United Nations study on violence against children. United Nations Secretary-General.
16. Tang, C.S. 2006. Corporal punishment and physical maltreatment against children: a community study on Chinese parents in Hong Kong. *Child Abuse and Neglect* 30:893-907.
17. Kempe, C.H., and Hefler, R.E. 1972. *Helping the battered child and his family*. Philadelphia: JB Lippinicott.
18. Miller, A.B., and Cross, T. 2006. Ethnicity in child maltreatment research: a replication of Behl et al.'s content analysis. *Child Maltreat* 11:16-26.
19. Elliott, K., and Urquiza, A. 2006. Ethnicity, culture, and child maltreatment. *Journal of Social Issues* 62:787-809.

20. Gershoff, E.T., Grogan-Kaylor, A., Lansford, J.E., Chang, L., Zelli, A., Deater-Deckard, K., and Dodge, K.A. 2010. Parent discipline practices in an international sample: associations with child behaviors and moderation by perceived normativeness. *Child Development* 81:487-502.
21. Segal, U.A. 1992. Child abuse in India: an empirical report on perceptions. *Child Abuse Negl* 16:887-908.
22. Roer-Strier, D. 2001. Reducing risk for children in changing cultural contexts: recommendations for intervention and training. *Child Abuse Negl* 25:231-248.
23. Asnes, R.S., and Wisotsky, D.H. 1981. Cupping lesions simulating child abuse. *Journal of Pediatrics* 99:267-268.
24. Greydanus, D.E., Pratt, H.D., Richard Spates, C., Blake-Dreher, A.E., Greydanus-Gearhart, M.A., and Patel, D.R. 2003. Corporal punishment in schools: position paper of the Society for Adolescent Medicine. *Journal of Adolescent Health* 32:385-393.
25. Ferrari, A.M. 2002. The impact of culture upon child rearing practices and definitions of maltreatment. *Child Abuse Negl* 26:793-813.
26. Brenner, S.L., Fischer, H., and Mann-Gray, S. 1989. Race and the shaken baby syndrome: experience at one hospital. *Journal of the National Medical Association* 81:183-184.
27. Rao, K., DiClemente, R.J., and Ponton, L.E. 1992. Child sexual abuse of Asians compared with other populations. *J Am Acad Child Adolesc Psychiatry* 31:880-886.
28. Maker, A.H., Shah, P.V., and Agha, Z. 2005. Child physical abuse: prevalence, characteristics, predictors, and beliefs about parent-child violence in South Asian, Middle Eastern, East Asian, and Latina women in the United States. *J Interpers Violence* 20:1406-1428.
29. Lansford, J.E., Chang, L., Dodge, K.A., Malone, P.S., Oburu, P., Palmerus, K., Bacchini, D., Pastorelli, C., Bombi, A.S., Zelli, A., et al. 2005. Physical discipline and children's adjustment: cultural normativeness as a moderator. *Child Dev* 76:1234-1246.
30. DeaterDeckard, K., Bates, J.E., Dodge, K.A., and Pettit, G.S. 1996. Physical discipline among African American and European American mothers: Links to children's externalizing behaviors. *Developmental Psychology* 32:1065-1072.
31. Lansford, J.E., Deater-Deckard, K., Dodge, K.A., Bates, J.E., and Pettit, G.S. 2004. Ethnic differences in the link between physical discipline and later adolescent externalizing behaviors. *Journal of Child Psychology and Psychiatry and Allied Disciplines* 45:801-812.
32. Dunne, M.P., Chen, J.Q., and Wan Yuen, C. 2008. The evolving evidence base for child protection in Chinese societies. *Asia-Pacific Journal of Public Health* 20:267-276.
33. Xia, G., and Qian, M. 2001. The relationship of parenting style to self-reported mental health among two subcultures of Chinese. *Journal of Adolescence* 24:251-260.
34. Berndt, T.J., Cheung, P.C., Lau, S., Hau, K.-T., and Lew, W.J.F. 1993. Perceptions of Parenting in Mainland China, Taiwan, and Hong Kong: Sex Differences and Societal Differences. *Developmental Psychology* 29:156-164.

35. Kim, D.H., Kim, K.I., Park, Y.C., Zhang, L.D., Lu, M.K., and Li, D.G. 2000. Children's experience of violence in China and Korea: A transcultural study. *Child Abuse and Neglect* 24:1163-1173.
36. Wong, W.C.W., Leung, P.W.S., Tang, C.S.K., Chen, W.Q., Lee, A., and Ling, D.C. 2009. To unfold a hidden epidemic: Prevalence of child maltreatment and its health implications among high school students in Guangzhou, China. *Child Abuse and Neglect* 33:441-450.
37. Chuang, S.S., and Su, Y. 2009. Do we see eye to eye? Chinese mothers' and fathers' parenting beliefs and values for toddlers in Canada and China. *J Fam Psychol* 23:331-341.
38. Chao, R.K. 1994. Beyond parental control and authoritarian parenting style: understanding Chinese parenting through the cultural notion of training. *Child Development* 65:1111-1119.
39. Shek, D.T. 1998. Adolescents' perceptions of paternal and maternal parenting styles in a Chinese context. *Journal of Psychology* 132:527-537.
40. Shek, D.T. 1995. Chinese adolescents' perceptions of parenting styles of fathers and mothers. *The Journal of genetic psychology* 156:175-190.
41. Nelson, D.A., Hart, C.H., Yang, C.M., Olsen, J.A., and Jin, S.H. 2006. Aversive parenting in China: Associations with child physical and relational aggression. *Child Development* 77:554-572.
42. Liu, M., and Guo, F. 2010. Parenting practices and their relevance to child behaviors in Canada and China. *Scandinavian Journal of Psychology* 51:109-114.
43. Xu, Y.Y., Farver, J.A.M., Zhang, Z.X., Zeng, Q., Yu, L.D., and Cai, B.Y. 2005. Mainland Chinese parenting styles and parent - child interaction. *International Journal of Behavioral Development* 29:524-531.
44. Chen, X.Y., Dong, Q., and Zhou, H. 1997. Authoritative and authoritarian parenting practices and social and school performance in Chinese children. *International Journal of Behavioral Development* 21:855-873.
45. Fan, R. 2007. Which care? Whose responsibility? And why family? A Confucian account of long-term care for the elderly. *Journal of Medicine and Philosophy* 32:495-517.
46. Cheng, S.T., and Chan, A.C.M. 2006. Filial piety and psychological well-being in well older Chinese. *Journals of Gerontology Series B-Psychological Sciences and Social Sciences* 61:P262-P269.
47. Lau, J.T., Liu, J.L., Yu, A., and Wong, C.K. 1999. Conceptualization, reporting and underreporting of child abuse in Hong Kong. *Child Abuse and Neglect* 23:1159-1174.
48. Morris, J.L., Johnson, C.F., and Clasen, M. 1985. To report or not to report. Physicians' attitudes toward discipline and child abuse. *American Journal of Diseases of Children* 139:194-197.
49. Orhon, F.S., Ulukol, B., Bingoler, B., and Gulnar, S.B. 2006. Attitudes of Turkish parents, pediatric residents, and medical students toward child disciplinary practices. *Child Abuse and Neglect* 30:1081-1092.
50. Wong, W.C., Chen, W.Q., Goggins, W.B., Tang, C.S., and Leung, P.W. 2009. Individual, familial and community determinants of child physical abuse among high-school students in China. *Social Science and Medicine* 68:1819-1825.

51. Connecticut Department of Children and Families. 2006. Mission and Guiding Principles.
52. Chua, A. 2011. Why Chinese Mothers Are Superior. In *The Wall Street Journal*. New York City: Dow Jones & Company.

Appendix A – Yale HIC approval and Xiangya IRB approval

Yale University

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To:	Andrea Asnes, M.D.
From:	Sandra Alfano, Pharm.D., Chair
Date:	05/24/2010
HIC Protocol #:	1005006719
Study Title:	Comparison of the Acceptability of Discipline Practices between Chinese Medical Students and Residents and US Medical Students
Approval Date:	05/24/2010
Submission Type:	Response to Previous IRB Notification

The research that you describe in your application involving the above-named project is exempt from HIC review under the parts of the federal regulations as noted below. Please keep a copy of this letter for your records.

Based upon the description of your project, the HIC finds the criteria below to be met. Please note that any revisions to this project must be submitted to the HIC for further review. At that point, a determination will be made regarding the continued exempt status of the research. You may keep a copy of this letter for your records.

Investigators conducting research involving human participants are required to report within 48 hours of discovery any serious and unanticipated adverse events related to the research participation and unanticipated problems involving risks to subjects or others occurring in the course of the research.

You should keep a copy of this letter for your records.

Review Comments:

- EXEMPTION 45 CFR 46.101(b)(2). This research is exempt from IRB review under federal regulation 45 CFR 46.101(b)(2). This part of the regulations covers research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects# responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects# financial standing employability, or reputation.
- The HIC will await approval from the Xiangya Medical School IRB.

Certification

The application to involve human subjects in research on "Cross-cultural comparison of the acceptability of disciplinary practices of Chinese medical students and residents and US medical students"(PI: Brady Heward, medical student at Yale School of Medicine; Faculty Advisor: Cao Yuping, M.D., Ph.D., Associate Professor, Mental Health Institute, Second Xiangya Hospital, Central South University, China) was approved by Ethical Committee of Second Xiangya Hospital of Central South University.

Director of Ethical Committee Yin Bangliang

Yin Bangliang

Second Xiangya Hospital

Central South University

2010.5.20

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Appendix B – Personal Experiences

The following summarizes some of the conversations I had as I spoke about my project with people I met while in China. These conversations informed and underscored my research and my understanding of the data I collected.

On the first day I met my mentor at Xiangya, I had the opportunity to sit and talk with roughly 10 of her graduate students, most of whom are involved in projects looking at domestic violence. I gained several insights at the time regarding how these students, whom were more aware of the problems surrounding violence than most Chinese, felt about child abuse. One individual stated:

> "Americans are concerned about abuse and corporal punishment because they believe that their children are not theirs alone. They believe that their children belong to them and God. Chinese parents believe that children only belong to themselves."

I have had a lot of time to reflect on that statement. In US culture, once a child is born, he/she is part of multiple groups, all of which have responsibility to ensure the "basic right to grow up in safe and nurturing environments and to live free from abuse and neglect" (51). If one group fails to meet their obligation, the next groups steps in. These groups include a family (both immediate and extended), citizens of a state and nation, and, to many Americans, creations of God. While belief in God can have multiple implications (including original sin and the need to stamp out the evil of a child), parents with strong religious beliefs may see their role as more of a steward than an owner. In contrast, Chinese and Confucius filial piety see the relationship from the opposite angle. Parents do not owe their children anything; it is the child that owes everything to the

parent (52). The graduate students went on to say that parents not only push their children to excel but often pay for their education and a house, in part, as an investment into their own future, a retirement plan of sorts. While this is an over simplification of the complexities of how each culture views parenting and children, it nonetheless highlights some of the differences.

During the same conversation, I asked about physicians reporting abuse to the police or another agency. They mentioned that, while the Women's Federation can help in cases of abuse and the police can intervene, they felt pediatricians and other health care providers were unlikely to report abuse due to three beliefs: nothing will come of reporting abuse, neighbors will likely intervene in cases of serious abuse, and it is the parents' right to punish their children as they see fit. Most of the graduate students admitted to being physically punished and they all felt that it was appropriate.

While working with a native Chinese English teacher at Xiangya to back-translate the questionnaires into English to insure consistency she provided several interesting insights. First, she stated that she did not feel that the study was interesting or worth doing. When I asked for clarification she stated that she felt abuse or discipline was no longer a problem in China for two reasons: First, China has not had a war for 50 years and therefore people have had time to read parenting books, and second, the one-child policy has lead to parents spoiling their children, and even if some do severely punish their children, the child knows that they love them and that they are doing it for their own good and will therefore not be likely to see it as abuse. This last point is consistent with Chao's theory regarding parental training (38). She went on to say that the survey for Chinese students and residents regarding reporting abuse did not "make sense." She felt

that Chinese see discipline as the parents' personal responsibility and the idea of intervening in someone else's parenting would be completely foreign. This again highlights the graduate students comment regarding how Chinese parents see their children as theirs alone and not the responsibility of others.