



**DEVELOPING A SOCIAL
MARKETING CAMPAIGN
TO INCREASE THE USE OF CHILD
BOOSTER SEATS IN JAPAN**

*History will judge us by the difference we
make in the everyday lives of children*

Nelson Mandela

A REPORT TO THE JAPAN
SOCIETY FOR THE PROMOTION
OF SCIENCE

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Undertaking the development and consideration to implement a social marketing campaign to increase child booster seat use requires the input, creativity and resources of many individuals and organizations, including the parents and caregivers who are the targets of the campaign. I am indebted to the many people who have given of their time, expertise and thoughtful consideration to support this project, particularly during my time in Japan in January and February, 2023.

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Thirdly, social marketing only works when the target population of the campaign is engaged. In order for this to happen, representative members of that population are needed to provide input as to what will resonate and result in the desired outcomes. I am particularly thankful to the parents and caregivers who give willingly of their time to engage in conversation about what might work, and importantly, what would not. Both groups of parents and caregivers were thoughtful, enthusiastic and concerned that the intended campaign will be successful. Thank you.

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BACKGROUND AND CONTEXT

In 2019, I was honored to receive a JSPS Fellowship and undertook work at the National Research Institute of Police Science (NRIPS) for 7-weeks in October and November under the leadership of Dr. Kazuko Okamura, collaborating with NRIPS researchers Ms. Yukako Nakano and Dr. Ritsu Kosuge.

The purpose of my Fellowship in 2019 was to explore opportunities for the development of a social marketing campaign to promote, improve and sustain the use of child-passenger safety restraints (CSR), specifically the use of booster seats among 4- to 8-year-old children. My visit provided several opportunities for academic and scholarly dialogue with Japanese researchers, professionals and students working in the areas of traffic safety, specifically child passenger safety; child and youth injury and violence prevention; and forensic pathology. I made formal presentations at different universities and research institutions with regard to various aspects of my current injury prevention and social marketing research, and I served as a collaborator and discussant for research staff at the National Research Institute for Police Science (NRIPS).

This work was motivated by the fact that while seat belt use by all passengers in Japan was mandated in 2008, and the use of CRS was mandated in 2000 for children ages 0 to 5 years. Unfortunately, this age range does not include those children who qualify for booster seat use, typically ages 4- to 8-years of age. Furthermore, although child passengers are recommended to ride in the rear seat of the vehicle, to protect them from front seat airbags (KidsPlaySafe, 2014), this is not promoted in Japan. According to the most recent annual survey conducted jointly by the National Police Agency (NPA) and the Japan Automobile Federation (JAF) in 2017/2018, only two-thirds of 0- to 5-year-olds were restrained using CRS, and the proportion of children restrained using CRS declined as children got older. Less than two-thirds of parents installed CRS correctly in the vehicle and more than half restrained the child incorrectly. In 2017, 18 children aged 6-years and younger were fatally injured while riding in passenger vehicles in Japan (0.26 per 100,000 population); while four child passengers aged 7- to 12-years were fatally injured in the same year (0.03 per 100,000 population). The most recent data related to child booster seat use Japan indicates only 53% use among those who should be restrained.

Following my Fellowship visit, investigators (Okamura, Nakano) at NRIPS successfully completed educational trials to promote the proper use of CRS among parents of children 4- to 5-years of age (manuscripts in preparation). And, they have continued collaborating with academics and professionals (Miyazawa of JAF; Kawato, Japanese Red Cross Narita Hospital; Nakajima, Osaka Prefecture University; and others). These relationships were established during my 2019 fellowship visit, with the hope to develop a population level public education social marketing campaign to improve the proper use of booster seats among 4- to 8-year-olds, and in turn, reduce road-related child injury and mortality in Japan.

In 2022, I was awarded a JSPS BRIDGE Fellowship in recognition of the work completed in 2019, and the opportunity to advance this work. The goal of developing a social marketing campaign to increase the proper use of child booster seats in Japan was undertaken through two related initiatives over 4-weeks in January and February, 2023. Firstly, a full-day meeting of expert key stakeholders (researchers, professionals, policy makers) in child passenger safety was held on January 31st to discuss potential solutions to improve booster seat use among parents of 4- to 8-year-old children in Japan. The meeting focused on current evidence supporting improved child booster use, and culminated in the development of recommendations and identification of organizations and agencies able to lead in the achievement of such recommendations. Secondly, two, two-hour parent/caregiver meetings were held on February 8th and 9th to discuss current attitudes, beliefs and behaviors, and formulate possible messages and communications intended to increase booster seat use. The parent/caregiver meetings were focused on identifying messages and communications channels that would be accessible, credible and that would resonate to motivate behavior change. Thus, forming the basis of a social marketing campaign to improve child booster seat use.

DECIDING TO CONDUCT A SOCIAL MARKETING CAMPAIGN

A social marketing approach was chosen following discussions in 2019 as the best solution to reach as many parents and caregivers of children 4- to 8-years of age as possible, particularly the uninformed and uninvolved. The initiative is intended to make long term changes in behavior, permanently embedding the proposition, *'If you think your child is big enough for an adult seat belt, think again!'* Thus, motivating parents and caregivers to question whether their children are seated in a child booster seat appropriate to their height, weight and age, in the rear seat of the vehicle and on every journey taken, regardless of how short. The campaign is intended to impact the decision-making process not only of parents and caregivers, but also to heighten the awareness and influence of local and regional health professionals, teachers and daycare workers, governing councils and businesses.

The campaign developers envisioned a campaign led and coordinated by the Japan Automobile Federation (JAF), an organization currently engaged in the public promotion of child passenger safety. With this leadership by JAF, the developers further envisioned a community in which use of the proposition was so well publicized and widespread, it would be unusual not to use it in decision making, and/or to seek additional information and expert advice. The developers of the campaign acknowledge the need for pilot-testing and further iterative development of messages, and the need for sufficient resources to conduct the campaign.

IDENTIFYING AGENTS OF CHANGE AND DESIRED BEHAVIOURS

In developing the child booster seat campaign and proposition, the developers needed to establish what was important to parents and caregivers of children 4- to 8-years of age living in Japan.

Additionally, they needed to understand the wants and needs of experts, professionals, family members, agencies and businesses – all of whom would be involved directly or as influencers in the delivery and maintenance of the campaign. This was done in two clear and related ways.

First, during my JSPS Fellowship in 2019, I met with various child health and injury prevention experts and professionals. In our discussions, we agreed that the process of child death review is a powerful tool in both understanding the epidemiology of child deaths and catalyzing preventive action to reduce child mortality. Meetings using this process allow for a collective better understanding of how and why children die, together with the development of recommendations for action to prevent future deaths and serious injuries. The child death review process was used to guide the agenda of an Expert Stakeholder Meeting held on January 31, 2023. The meeting included presentations on the current epidemiology of child passenger injuries and deaths in Japan; the current worldwide evidence to improve child booster seat use; existing efforts in Japan to increase booster seat use; and, which culminated in the development of recommendations and the identification of organizations and agencies able to lead in the achievement of such recommendations. A professional service was engaged to translate from Japanese to English, for my benefit, though many of the expert attendees were strong in their English language abilities.

Expert stakeholders who attended the meeting included NRIPS investigators, Dr. Kazuko Okamura, Ms. Yukako Nakano, Dr. Ritsu Kosuge; Japan Automobile Federation leaders, Mr. Yoshitaka Tanno and Mr. Shigeru Mochizuki; Chiba University Associate Professor, Dr. Go Inokuchi; Osaka Metropolitan University Associate Professor, Ms. Yukari Nakajima; Tokyo Medical and Dental University investigators, Professor Takeo Fujiwara and Dr. Tomoki Kawahara; and, Tsukuba University investigator, Professor Masao Ichikawa. Each expert stakeholder was invited because of their unique expertise and understanding of child health, child injury prevention and child passenger safety. The expert meeting included opening remarks and statement of purpose; individual introductions citing existing academic and professional activities in child health, child injury prevention and child passenger safety; a review of investigative findings related to child passenger death and injury, with a focus on children 4- to 8-years of age; environmental, social and medical factors associated with the child passenger deaths and injuries; a review of the current state of related public policy, programs and

available services; identification of existing challenges; and, collective conversation in response to three pre-proposed questions:

1. How do we reach uninvolved parents and caregivers with a public education campaign that will result in a change in behaviour and the proper use of child booster seats for all motor vehicle journeys?
2. What are the critical messages that uninvolved parents and caregivers need to hear in order to change their behavior?
3. Who has the credible voice(s) to deliver the campaign critical messages?

The second aspect in the development of campaign messages was to speak with parents and caregivers of children of booster seat age in order to better understand current sources of child health and safety information, and specifically child passenger safety information. Consultation with the target audience in the development of key messages is a fundamental tenant in the development of a social marketing campaign intended to resonate and have effect to shift attitudes and behaviours. The parent and caregiver meetings were two hours in duration and held on February 8 and 9, 2023. The February 8th meeting involved 3 mothers and 1 father, and the February 9th meeting included 4 mothers and 1 grandmother. Ms. Yukako Nakano facilitated the meetings while Dr. Kazuko Okamura provided translation from Japanese to English for my benefit.

Parents and caregivers were welcomed and invited to introduce themselves to each other by way of describing their typical behaviours when transporting their booster seat age child. Facilitated conversation continued and explored parent and caregiver perspectives and understanding of existing child booster seat laws and/or recommendations, the safety benefits of child booster seat use, and facilitators and barriers to consistent use, as well as social norms including how parents and caregivers react (or don't) when they see others behaving in 'risky' ways. Following a short break, parents and caregivers were asked to consider where they obtain information on child health and safety, and specifically, child passenger safety information. Finally, they were asked to indicate who would be credible in delivering specific child booster seat information to them, and what form of communication(s) would motivate them to always use a child booster seat, placed in the rear seat of the vehicle, on every journey, no matter how short.

The goal of the parent and caregiver meetings was to focus on identifying key concepts, credible voice(s) and communications channels that could form the social marketing campaign to improve child booster seat use. Critical to this development, was a consideration of the recommendations resulting from the Expert Stakeholder Meeting. The art and science of developing the child booster seat campaign in Japan depends upon integrating the wants and needs of both groups in order to develop an effective and sustainable social marketing intervention.

THE EXPERT STAKEHOLDER MEETING OUTCOMES

Experts were interested to discuss the current state, and the potential use of technology within passenger vehicles to increase the use of seat belts, particularly the use of child booster seats and rear seat belts in general. This discussion was prompted by the understanding that over the past 2 to 3 decades some 40% of all motor vehicle occupants who died in a crash were not wearing a seat belt. And, while the proportion of children in Japan who should be restrained in a child booster seat has improved over the past 20 years from 28% in 2004, the proportion reported in 2022 was only 53%, leaving almost half of this child passenger population at high risk of serious injury and death in the event of a motor vehicle crash.

Experts suggested consideration of a car seat interlock device that prevents the vehicle from being started or put into gear until all seat belts are engaged where a passenger is detected in the seat. They went on to suggest the use of an alarm that continues to sound until all seat belts are engaged where a passenger is detected in the seat. Distinguishing between a passenger or any other weight (e.g. luggage) on the seat could be accomplished by a simple temperature sensor, an in-car video sensor, or simply requiring the seat belt to be engaged when weight is detected on a passenger seat. The experts went on to suggest working with vehicle manufacturers to engineer adjustable rear seat belts such that the belts could be lowered to accommodate the shoulder height and stature of children who should be seated in a booster seat. It was acknowledged that this solution, while feasible, would be at best many years away and apply only to new vehicles. Experts agreed that until then, efforts must continue to promote the use of booster seats, that they be installed correctly in the rear seat of the vehicle, and used on every journey, regardless of how brief.

In response to the pre-posed questions, experts agreed that there are few opportunities for parents to obtain or receive good, simple-to-understand child safety seat information, in particular booster seat information. Resources are somewhat improved for young children who require rear-facing or forward-facing child seats, and indeed, use rates in 2022 tend to support this (proportion using rear-facing seats – 89.9%; forward-facing seats – 76.7%). However, information related to booster seats is sparse and confusing where it does exist, resulting in only 53% of booster age children using a booster seat. There was general consensus that booster seat information could be simplified and made available through the following channels:

Daycare Centres

It was recommended that efforts be made to:

- Expand upon the current delivery of child passenger seat safety seminars at daycare centres (children 4-years and older)
- Capitalize on the fact that daycare centres are concerned about traffic safety and that daycare staff and nurses are credible voices to deliver booster seat information to parents
- While Japan Automobile Federation (JAF) does provide seminars for daycare workers and nurses, and parents, these are offered upon request and depends upon the enthusiasm of the daycare operators. JAF is encouraged to take a proactive approach to engaging with daycare centres, not just to deliver child safety seat seminars, but to engage them in the ongoing support of the child booster seat social marketing campaign
- It was noted that parents and caregivers are attentive to material that daycare centres distribute and send home to them, creating an ideal communication channel and opportunity to influence parents' knowledge and behaviour

The consensus among experts was that more effort was needed to convince daycare centres of the importance of them taking a strong role in facilitating child booster seat communications, both for their staff and nurses, and for the parents of children that attend.

Ministry of Health, Labour and Welfare

In previous parent focus groups (Nakano, 2019), parents were unaware of the need to keep a child in a booster seat after age 6 years, and that the booster seat should be installed in the rear seat of the vehicle, and used on every journey, regardless of how short. The Ministry of Health, Labour and Welfare provides the *Maternal and Child Health Handbook* ([http://bosui.or.jp/pdf/母子健康手帳\(英語版\).pdf](http://bosui.or.jp/pdf/母子健康手帳(英語版).pdf)) to new parents. Experts agreed that this document provides a communication channel opportunity to reach the maternal health nurses, and parents and caregivers with relevant child passenger safety information.

The *Maternal and Child Health Handbook* currently contains limited general information on passenger seat safety (p.92) with links to information provided by other agencies, including:

- National Police Agency website
(<https://www.npa.go.jp/bureau/traffic/anzen/childseat.html>)
- Ministry of Land, Infrastructure, Transport and Tourism website
(<http://www.mlit.go.jp/jidosha/anzen/02assessment/>)
- National Agency for Automotive Safety & Victim's Aid (NASVA)
(http://www.nasva.go.jp/mamoru/child_seat_search)

It was noted that the value of the *Handbook* to booster seat use, is conveying the importance of, and creating the habit of child safety seat use from birth until approximately age 10, when the child is of sufficient height and weight (height > 139 cm; weight > 36 kg) to be safely seated in an adult seat belt. Cementing car seat safety knowledge and behavior, leading to consistent booster seat use, is important to establish early in the child's life, and because the *Handbook* is utilized heavily, particularly during the first three years of a child's life, it represents an important communications channel. It is recommended that child passenger safety seat information be included as an additional item in the health checklist of items to be discussed with parents and caregivers by maternal nurses

Japan Pediatrics Society

Pediatricians are ideally positioned to provide essential information to parents and caregivers related to child passenger safety. In Japan, pediatricians provide health care to children from birth to age 15-years, during which time children are required to be seated in an approved child passenger seat or booster seat, depending upon their height and weight, whenever they are traveling in a passenger car. The Japan Pediatric Society (JPS), Children's Living Environment Improvement Committee, CPS Working Group (Takashi Etoh, Johnichiro Takayama, Tatsuhiro Yamanaka. *Journal of the Japan Pediatric Society* Vol.112 No.6) published recommendations for safe car travel for children in 2008 (https://www.jpeds.or.jp/uploads/files/080702_teigen.pdf). The recommendations describe the basic knowledge that pediatricians should have and proposes the role that pediatricians should play with regard to parent and caregiver child passenger safety education.

The document acknowledges that there are little to no efforts to instruct and educate professionals in how to guide and educate parents and caregivers on the correct use of child passenger safety seats in Japan. There are no long-term plans by government or other related institutions to fill this gap. Regrettably, this situation continues today, with perhaps the exception of a few individual pediatricians and the efforts made by the Japan Automobile Federation to provide educational seminars to parents and caregivers. It is recommended that the Japan Pediatrics Society undertake to review and update the recommendations for child passenger safety, including the addition of information related to the use of booster seats by children who have outgrown rear-facing and forward-facing child safety seats. And, that the JPS undertake to provide continuing education training to pediatricians (and general practitioners) in order that they are able to provide child passenger safety counseling to parents and caregivers.

Private Businesses

Experts discussed the role of private businesses in delivering messages to parents and caregivers regarding the required and appropriate use of child passenger booster seats. Similar to other countries, businesses in Japan are interested in being seen as good corporate citizens, particularly in communities where they operate and where their employees and customers reside. Experts focused their discussion on two key business sectors, though it was acknowledged that other private sector businesses can play an equally compelling and influential role.

- *Automobile Dealerships* were considered a natural provider of child passenger safety seat information, and may also serve as a point-of-sale for child passenger safety seats. Similar to the education provided to pediatricians, automobile sales staff (or specialized members of the sales staff) can be trained to provide child passenger seat information to families with children. Further, sales staff could be trained as child passenger seat technicians who could provide inspection and ensure correct installation. It was thought that this would be seen as a value-added service by customers, and may even be a market differentiator for that automobile dealer, resulting in increased customers and sales, and improved reputation.
- *Gas Stations* were recommended as another opportunity to deliver child booster seat messages to drivers and families. Gas station staff (or specialized members of the staff) can be trained to provide educational information to families with children. Further, gas station staff could be trained as child passenger seat technicians who could provide inspection of child passenger seats and ensure correct installation while vehicles visit to purchase fuel. This may be seen as a value-added service by customers, and may even be a market differentiator for that gas station, resulting in increased customers and sales, and improved reputation.

Importantly, both strategies were seen as opportunities to reach fathers as well as mothers with child passenger safety information, as fathers may more likely be engaged in the refueling and purchasing of family vehicles.

Japan Automobile Federation

The Japan Automobile Federation (JAF) is a widely recognized and respected organization, providing valuable programs and services to motorists in Japan. Experts agreed that JAF is ideally situated to serve as a child passenger safety 'hub' leading the delivery of a social marketing campaign and coordinating efforts of groups supporting the campaign. Further, JAF is ideally positioned to take advantage of social media messaging platforms and to distribute accurate and timely messages to parents and caregivers. Currently, JAF provides educational seminars upon demand (e.g. to daycares and schools) and has robust Social Media platforms and a YouTube channel with some video information on child passenger safety. Given its role and recognition in Japan, experts felt that JAF is positioned to:

- Develop, launch and co-ordinate a social marketing campaign to educate parents and caregivers on the importance of booster seat use. In addition to the booster seat messages, others (particularly social media influencers) would be encouraged to re-send and amplify the messages.
- Work directly with social media influencers to provide them with accurate and engaging booster seat information and creative content, so that they can reach their own audiences and followers, in turn, encouraging those audiences to re-send and amplify the messages.

It was noted that in all instances, JAF controls the accuracy of the content, and it is understood by others that the content and messages cannot be altered.

Experts also recommended the need to simplify the current JAF *Child Seat Quick Guide* publication, to develop three distinct packages, each focused on the particular needs of children at different developmental stages:

- Babies that should be seated in a rear-facing child safety seat
- Infants that should be seated in a forward-facing child safety seat
- Children that should be seated in a child booster seat

Further, JAF is encouraged to consider developing an online tool and smartphone application for parents and caregivers with the goal to engage parents and caregivers with 'personalized' information related to their particular child's car seat safety requirements. Similar to the NHTSA car seat finder tool, JAF would develop an online tool and smart phone application that allows parents and caregivers to enter information related to their child's developmental stage, which results in information regarding the appropriate required child safety seat, accompanied by additional messaging on the appropriate installation and use of that seat.

THE PARENTS AND CAREGIVERS MEETING OUTCOMES

Parents and caregivers reported transporting their children ranging between 2 days per week to 6 days per week, including trips to and from school, lessons, or leisure activities. During weekdays, these trips were invariably taken with the mother as the driver, while the father drove almost exclusively on weekends. Parents reported variability in child car seat use. Among mothers, most reported no use of a child booster seat for a variety of reasons including, the child had graduated from kindergarten, the child wished to ride in the front seat next to the mother while she drove, and the mother felt the booster seat was dangerous when the child slept in the seat. One mother indicated that the use of the booster seat and belt was left to the child to decide. Another mother reported that she rarely uses the booster seat and belt when traveling in her local neighborhood. Finally, one mother reported that her child rode in the rear seat of the car but not in a booster seat, because the child wore their randozeru (back pack), which would not fit into the booster seat

One mother and the father reported using a booster seat on every trip. However, the mother reported that while her child uses a booster seat when traveling with members of her family, the child does not when friends are also being transported, as her child did not wish to feel 'childish'. Mothers reported that the reason they use a booster seat was so that the adult shoulder strap would not irritate their children's necks. Still, most children placed the vehicle shoulder strap behind them or under their arm. Mothers reported that their children did not like the feeling of being constrained. When asked if they had or used an adjuster to locate the adult shoulder strap appropriately on the child, they reported that they did not have one, or did not use it. Most mothers and the father reported not knowing that children should remain in a booster seat until they are 140cm in height. One mother said that there are height and age standards, and that she thought they should remain in a booster seat until age 9, while another indicated until 120 cm in height. In general, parents and caregivers were unaware of the recommendations related to child booster seat use for their children.

When asked where they obtained information related to their child's health and safety, the father reported obtaining information from baby goods stores (akachanhonpo or nishimatsuya), and leaflets provided by the hospital at the time of his child's birth. These sources however were relevant when his child was an infant, and now he rarely accesses this type of information. He does use Twitter and LINE social media platforms, which again, he used more frequently when his child was an infant. Most mothers reported that they do not subscribe or obtain child health and safety information via social network platforms. However, one mother indicated that she subscribed to news from the City of Nagareyama, which included child safety material, and others said that they watch YouTube, but could not identify sources for child health and safety. One mother reported receiving leaflets and documents from the hospital and elementary school in the past. Mothers reported that the opportunity to exchange information with other parents and caregivers has been severely impacted by COVID-19, saying that before and after class visits had been cancelled.

When asked if they could recall where they obtain child passenger safety and booster seat information, one mother said that this information might have been in the set of papers she received when she gave birth. She also saw information at the children's goods shop

(akachanhonpo) and knew that she should use a child safety seat when transporting her child home after birth. She may also have seen police posters and notices in her neighborhood. She did not report specifically on booster seat information. The father reported that he could not recall seeing any information regarding child passenger safety and / or booster seats for children of this age, only for infants. Beyond these two respondents, other parents and caregivers indicated that they could not recall receiving child booster seat information, nor where they could obtain such material.

In the absence of available child booster seat information or sources, parents and caregivers were asked to consider what would be effective in communicating this information to them. The father indicated that shops that sell children's goods or supermarkets are a good venue to provide child booster seat information. Mothers indicated that a YouTube video would get their attention. They went on to say that the messages needed to be simple and instructive, and would be more effective if they were humorous (one mother recalling an effective bicycle helmet video delivered by stand-up comedians).

Most agreed that information delivered by their child's kindergarten and school gets their attention and gets read. The father agreed that teachers would be effective and more so than other parents. One mother preferred to receive this type of information in hard copy rather than be referred to an email or online platform. Mothers also indicated that car dealerships represent a good venue to provide booster seat information. This would be particularly effective if the dealers had seats available for purchase, provided discounts, ensured particular booster seats that fit particular vehicles, and assisted/instructed fitting of seats to the vehicle. Other mothers indicated that booths at festivals and stadiums was a good opportunity to reach parents with booster seat information, particularly important to have actual booster seat products available for purchase.

Parents agreed that providing solid reasons as to why a booster seat should be used was critical. One mother indicated for example, that she was shocked to learn at this meeting that the reason for a booster seat was to position the adult belt appropriately across the child's shoulder, chest and hips as a means of protection from crash forces. Parents also agreed that providing stories of the lethal consequences and the tragic losses that could occur, was convincing. On the other hand, simply indicating that it is the law, or a violation of the law, and that you could receive a fine or demerits is not a compelling reason for parents and caregivers to use a booster seat.

Finally, when asked who would be credible and compelling to provide booster seat information to them, all parents agreed that teachers and kindergarten staff were credible to deliver such messages and information. They also agreed that pediatricians and primary care providers are a credible source of booster seat information, particularly at the time of general health check-ups and pre- school health check-ups. Despite the impact of COVID-19 on the ability of parents and caregivers to gather before and after kindergarten drop-off and pick-up, mothers indicated that these gatherings offered a venue for the delivery of important booster seat messages, and that peer-to-peer education and advice was powerful. Additionally, PTA officers, older parents and grandparents were important influencers

Clerks and point-of-sales staff at children's stores were seen as credible, though one or two parents were skeptical, citing sales as the driver and less so a concern for child passenger safety. One mother recommended the development of child passenger safety information on a general traffic safety online application. One mother indicated that JAF was a credible voice for booster seat safety. And, still another mother wondered whether shichi-go-san ceremonies were an appropriate venue for booster seat information to be provided to parents and family members.

SYNTHESIZING THE OUTCOMES

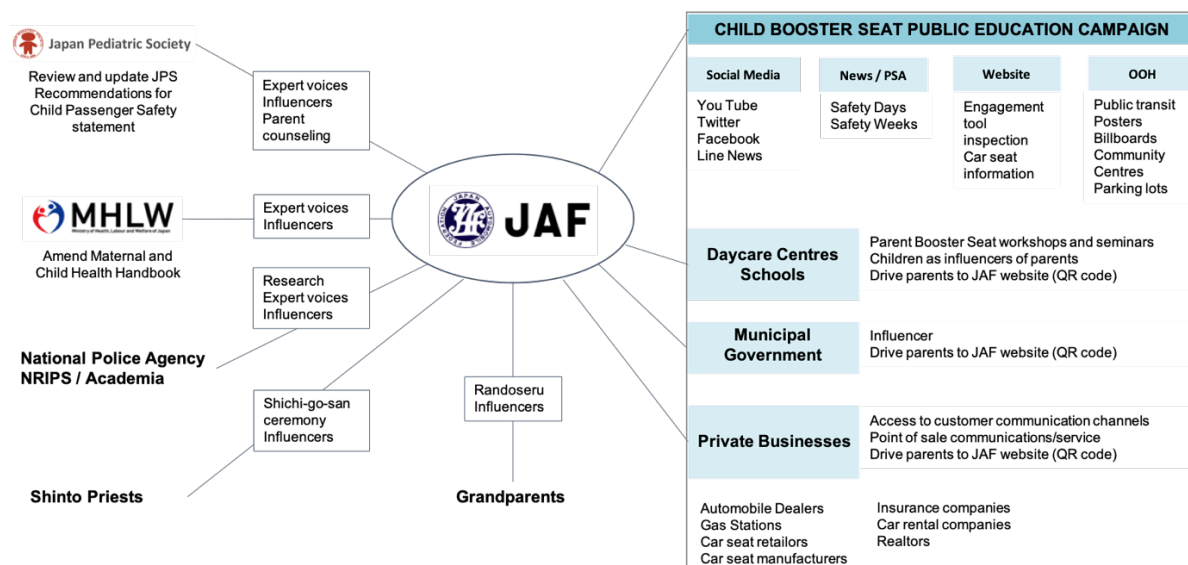
Experts, and parents and caregivers agreed that there are few opportunities for parents and caregivers to obtain or receive good, simple-to-understand child safety seat information. It is important to ensure that critical messages reach parents and caregivers in a way that motivates their behavior. As such, there was general consensus that booster seat information should be simple to understand, focused on the desired behavior, and without superfluous data and information that might confuse the message and result in disinterest or disengagement. Parents were clear that messages simply stating that child car seat use is the law would not be compelling. Messages need to focus on the possibly lethal consequences in the event of a car crash where their child is unrestrained.

Both experts, and parents and caregivers agreed that daycare and kindergarten teachers and nurses were credible to deliver booster seat messages, and that parents and caregivers are attentive to information received from these sources. In addition, they agreed that private business, including children’s good stores, automobile dealers, gas stations, and child car seat dealers represented opportune communication channels. Additionally, experts cited opportunities to influence parent and caregiver behavior by primary care professionals, including maternal health nurses and pediatricians. Finally, experts were very clear on the need for campaign leadership and coordination, strongly suggesting JAF as ideally positioned to assume the role.

CAMPAIGN LEADERSHIP AND COORDINATION

The Japan Automobile Federation is widely recognized, and is ideally situated to serve as the child passenger safety ‘hub’ leading the delivery of a social marketing campaign on child booster seats. JAF has existing relationships with many of the agencies and organizations seen as critical to the delivery and support of the social marketing campaign. And, JAF has robust communication channels, including social media platforms and a YouTube channel with existing video information on child passenger safety. Given its role and widespread recognition in Japan, it is felt that JAF is ideally positioned to lead the social marketing campaign.

Figure 1. Japan Automobile Federation. Child Booster Seat Campaign ‘Hub’



IDENTIFYING KEY CONCEPTS FOR CAMPAIGN MESSAGING

Messages focus on the desired behavior, are simple, motivating and intended to increase the likelihood of success through increasing self-efficacy among uninvolved parents and caregivers.

The overall message challenges the belief among parents and caregivers that children over the age of 6-years of age can be safely restrained in an adult seat belt. Without overwhelming parents and caregivers with statistics, technical jargon, child growth charts, horrific video or shaming, the messages are designed to appeal to parents' and caregivers' desire to be guardians of their children's health, safety and well-being.

Overall messages are designed to cause parents and caregivers to question their belief that children over 6-years of age can ride safely in an adult seat belt, and to take corrective action. Based upon the discussions with parents and caregivers, three message concepts are proposed and require further testing and refinement:

Concept 1. Big Enough

Message: **If you think your child is big enough for an adult seat belt, think again!**

Concept 2. Correct Seat

Message: **Are you sure your child is in the correct car seat?**

Concept 3. Guardian

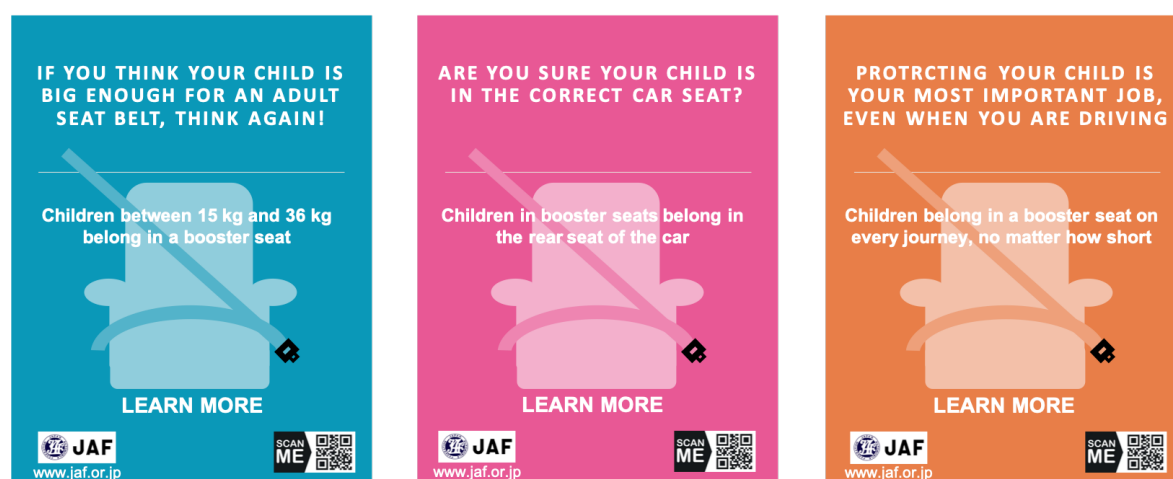
Message: **Protecting your child is your most important job, even when you are driving!**

Supporting the three concept messages are associated messages, that serve as sub-text to each of the overall concept messages. Again, these are proposed messages and require further testing and refinement:

1. **Children between 15 kg and 36 kg belong in a booster seat**
2. **Children belong in the rear seat of the car**
3. **Children belong in a booster seat on every journey, no matter how short**

The overall goal of the campaign is to cause parents and caregivers to question current beliefs, drive them to a credible source for additional information and services, and to act to correctly use a child booster seat.

Figure 3. Possible Social Media/Poster message treatments

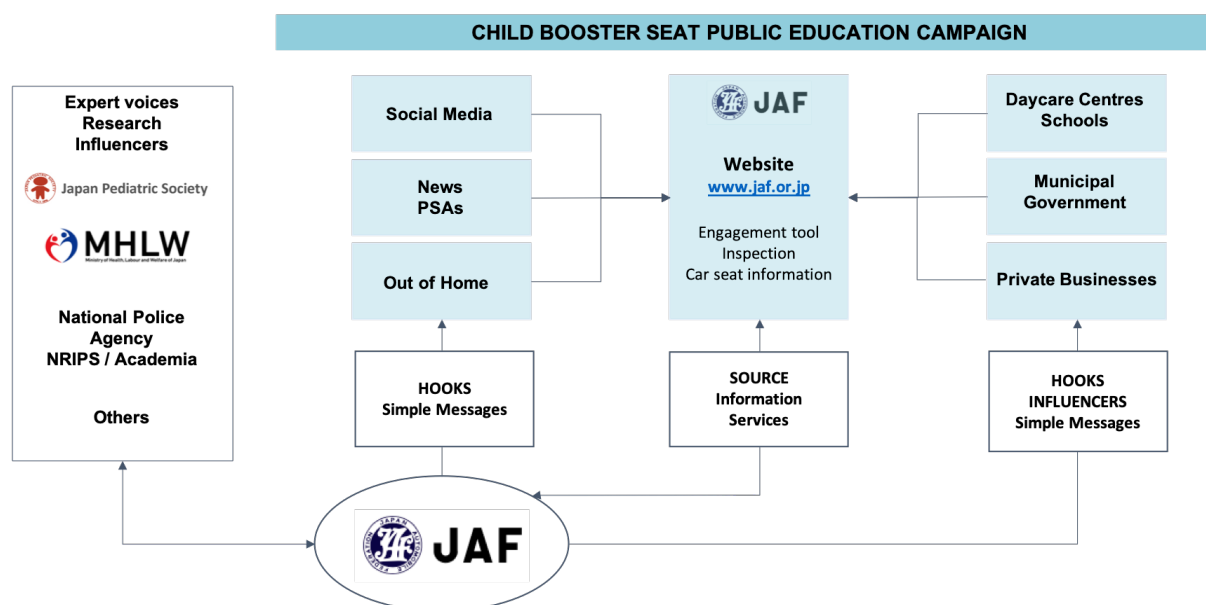


COMMUNICATION CHANNELS AND OVERALL CAMPAIGN STRATEGY

Currently, only 53% of children of child booster seat height, weight and age in Japan are appropriately seated in a booster seat. The overall goal of the social marketing campaign is to reach the 47% of uninvolved parents and caregivers through a variety of different community channels and influencers. The objective is to attract the attention of these parents and caregivers in a way that causes self-reflection, promoting a desire to obtain further information with the intent to act to correctly use a child booster seat. Campaign messages are designed to drive parents and caregivers to a credible source of information - the JAF website.

Messages are designed to serve as simple hooks to gain parent and caregiver attention and to drive the to the JAF website (Figure 2). Messages will be displayed on social media platforms, with the invitation to social media users and bloggers to re-transmit and amplify the message. Efforts will be made to earn media attention through appropriately timed news releases (e.g. road safety week) and public service announcements, and the strategic placement of out-of-home posters (e.g. transit shelters, community centres, physicians' offices, health centres, public transport). Messages will also be delivered through campaign partners and influencers, including primary health professionals, daycare and kindergarten staff, municipal government news feeds, and private businesses.

Figure 2. Japan Automobile Federation. Child Booster Seat Campaign Process



Locating JAF as the 'hub' for the campaign and the credible source of information for parents and caregivers ensures central control over the accuracy and timing of the campaign. Further, it alleviates the possibility of message overlap that can create confusion among parents and caregivers, and allows for more efficient use of resources.

In order for the campaign to succeed, the child booster seat campaign incorporates three well- understood components from marketing research to increase the likelihood of the campaign message being successful: 1) a good product; 2) good market research about issues important to the audience; and 3) resources for advertising and access to communications channels. It is acknowledged that advertising is futile if the product is not connected to the needs of the audience, and by extension the community civic and business leadership.

In a follow-up meeting on February 16, 2023 with Messrs Tanno and Mochizuki from JAF, Dr. Okamura, Ms. Nakano and Prof. Pike presented a summary of the expert, and parent and caregiver meetings, synthesizing the key points and recommendations, including the proposed central role to be taken by JAF. Nakano reported the key findings from the parent and caregiver meetings, while Pike reviewed the expert meeting outcomes. Okamura facilitated the meeting and provided English- Japanese translation.

In these discussions, it was acknowledged by Tanno-san and Mochizuki-san that the parent and caregiver recommendation to provide child passenger safety information and messages via daycare and schools was one that could be acted upon in short order. Currently, JAF provides training to daycare and kindergarten staff and nurses upon request. This information is then is redelivered to parents and caregivers. Using daycare and school communications channels to reach parents and caregivers directly with messages and information in a proactive way is something that JAF could act upon in the short term as a way to try and increase the number of parents and caregivers who have access to the appropriate child passenger safety material.

On the recommendation that JAF take on the leadership and coordination of a child booster seat social marketing campaign, there was agreement that it is well-suited to assume this role, subject to senior leadership approval and incorporation into the JAF business cycle. It was discussed that the earliest realistic date that this could be accomplished would be in fiscal 2024. Given the need for further development and planning of the social marketing campaign, and the need to implement and evaluate the recommended messages through a specific demonstration or pilot project, this timing was seen to be appropriate.

It was recommended by Tanno-san and Mochizuki-san that a presentation be made to JAF senior leadership by Professor Pike to explain the recommended role of JAF in relation to the child booster seat social marketing campaign, including the implementation and evaluation of a pilot project. The timing of this presentation so as to influence the JAF business cycle planning, was recommended to be in the period May to September, 2023.

POTENTIAL PILOT PROJECT SITE, AUDIENCE AND PARTNERS

A pilot project site, in which the current child booster seat messages can be evaluated is needed, and identifying a potential community or prefecture should be based upon several factors to ensure the highest likelihood of success. Firstly, the site should have an appropriate target audience - a high proportion of families with children of booster seat use age in order to maximize the potential of the campaign to reach that audience. The audience should make a sufficient number of journeys with children in a car, such that the campaign messages have relevance. And, the audience should have a readiness and receptivity to the campaign goals.

Personal factors that might increase or decrease the efficacy of the campaign include a person's knowledge of the need for a child booster seat, the children's need for adult supervision with regard to child passenger safety and booster seat use, their beliefs in their own effectiveness to ensure that their child passenger(s) always travel safely in a booster seat, and their knowledge of the availability of additional information and technical help. Environmental factors that might increase or decrease the likelihood of the desired behaviors include lack of breakthrough of the campaign (e.g. using the wrong communication channels), insufficient frequency or saturation of messages, competing messages, the lack of recruitment from sectors that can influence parents and caregivers to appropriate use of child booster seats, Broader conditions that may affect the outcomes of the campaign include beliefs about parenting and responsibility for children's health, safety and well- being.

In order to increase the likelihood of success, the campaign pilot project will be implemented over 12 months in three phases: firstly in Q1, it will increase awareness that the campaign for child booster seat safety will be launched in Q2; secondly and also in Q1, it will challenge business and civic leaders, daycares and schools, and primary health professionals, to commit to supporting the campaign and to influence parents and caregivers; and thirdly in Q2 to Q4, it will encourage and reinforce the actual desired behavior changes using the multiple communications channels and influencers identified.

Leaders, representing the sectors that will provide communications channels and influence parents and caregivers need to commit to providing their time, talent and sometimes treasure, to the campaign. A broad spectrum of leadership should be represented, including those from daycares and schools, local government, private businesses, primary health care, and importantly, the media.

Influential partners will be those individuals and organizations within the community who will spread the message through their networks and communication channels, who can provide knowledge and insight into the campaign's messages, and motivate others to start using child booster seats on every car journey. Each influential partner is expected to work within his or her own sphere of influence to bring about change. JAF will need to provide a strong leadership role in coordinating and supporting the efforts of the community leaders and influencers, in particular those who do not understand social marketing. Research institutions (NRIPS, universities) and investigators (current experts) will be engaged to help guide the implementation and evaluation of the campaign.

Other strategies to make adoption of the behavior more probable include JAF publicly thanking those who support the campaign at organizational functions, like community dinners, and through opinion-editorials in local newspapers. It is expected that JAF and other campaign leaders will author articles related to the campaign over the 12-month time period. JAF is encouraged to work with local media to use the articles and campaign stories frequently through the time period. Additionally, JAF should ensure an end-of-pilot-campaign celebration to recognize the community and in particular, the parents and caregivers who change their behavior to use booster seats.

TAILORING CAMPAIGN COMPONENTS

In order to increase the impact of the campaign, messages will be shown at strategic times and locations in order to reach the audiences. For example, primary health care professionals, daycares and kindergartens, and stores selling child products are high likelihood channels to reach mothers because our own research (Nakano, 2019, 2023) indicates this audience is more likely to attend to child booster seat messages provided through these channels. In order to reach fathers, messages delivered by private businesses, including car dealerships, gas stations are more suitable. Engaging business and civic leaders will include direct invitations, face-to-face presentations, and local news channels. Media messages will be created to attract earned media (e.g. news, op-eds), and a robust social media and out-of-home campaign will be developed. Primary channels of influence include daycares, kindergartens and schools, primary health care professionals, local government news feeds, businesses, broadcast media.

EVALUATING THE EFFECTS

In partnership with JAF, NRIPS and other expert investigators will be involved in evaluating the success of the campaign to raise awareness and create behavior change in the pilot community compared to comparison sites. Evaluation will likely include surveys of representative samples of parents and caregivers in the pilot site and comparison sites to inquire about their familiarity with the campaign, their recognition and recall of key messages and campaign components, and their

actions to use a booster seat consistently and appropriately when transporting their child. A tracking system will be devised to assess how awareness and behavior changed in the pilot site, documenting the community changes and response to the campaign for the 12-month campaign period and a 6-month post campaign period.

The National Police Agency tracks child passenger injuries and deaths, and the system allows for the assessment of any differences in the pilot site compared with the comparison sites. Pre-campaign data, campaign period data and post-campaign period data will be compared to test for the significance of any differences between the campaign site and comparison sites on the rates of child passenger injuries and deaths.

Other changes directly influenced by the campaign will be assessed. For example, it may be that car dealerships in the test site see a business advantage in providing child passenger seat safety services as part of the sale of a new vehicle. Similarly, gas stations and stores that sell child products, including child car seats, may offer car seat installation services as a result of their participation in the campaign. Daycares and schools may formalize child passenger safety training for students and families as part of their curriculum and standard of practice. And, primary care professionals may all include child passenger safety counseling as part of their care practice. All of these changes, particularly those that persist as a 'way of doing business' will be assessed and documented, as evidence of the impact of the child booster seat campaign on the community and its beliefs and practices related to child passenger safety.

CELEBRATING AND SUSTAINING THE EFFORT

A community celebration will accompany the kick-off of the pilot social marketing campaign and subsequent monitoring reports will be put out by JAF and the campaign leaders. Articles will be published in the opinion editorials thanking the community, parents and caregivers, civic and business leaders and all campaign supporters for advancing child passenger safety in the community. Thank you notes will be sent out throughout the campaign to thank those who play a role in advancing and supporting the campaign.

While it is expected that the pilot campaign can be sustained for the planned 12-month period, long-term sustainability may be more elusive. It will be imperative that JAF leads and coordinates the pilot campaign in such a way that the community embraces the campaign as 'theirs'. And, it is understood that developing a strong sense of community ownership means identifying community agencies and organizations who will serve as leaders and champions for sustainability in the future.