Introduction and development of schoolwide positive behavioural support in Japan

Kanako Otsui¹, Kazuki Niwayama², Kenichi Ohkubo³, Yoshihiro Tanaka⁴ and Wataru Noda⁵

- ¹ Kindai University
- ² Osaka Kyoiku University
- ³ Kio University
- ⁴ Osaka Shoin Women's University
- ⁵ Osaka Kyoiku University

Summary

Background: This paper describes the introduction and development of School-Wide Positive Behavioural Support (SWPBS) in Japan. The educational system in Japan is described, with a focus on elementary and junior high schools. Over the past decade, an increase in challenging behaviours from students, multiple demands on teachers' time, and a productive history of behaviour analytic services in schools led to an interest in the adoption of SWPBS at the Tier 1 level. Adoption is described across the four stages of implementation defined by implementation science: exploration, installation, initial implementation and full implementation. After successful exploration and installation in one elementary school in Tokushima Prefecture in 2016, initial implementation was extended to other elementary and junior high schools in the same prefecture and then to other regions of Japan. As of 2022, Tier 1 SWPBS has been adopted in approximately 400 schools in Japan. Cultural adaptations that have contributed to adoption include campaigns led by school personnel and students to teach school-wide behavioural expectations. Three issues related to the full implementation of SWPBS in Japan and further adaptation to Japanese culture are discussed.

Keywords: School-Wide Positive Behaviour Support, Applied Behaviour Analysis, Japan, Japanese schools, implementation science, cultural adaptation

Introduction

One can argue that in any country, society has an important responsibility to create a fulfilling educational environment for children. While providing such an educational environment also is important in Japan, we currently have numerous problems surrounding children and youth, and see teachers struggling to respond to these challenges. Under such circumstances, educators in Japan are showing a growing interest in School-Wide Positive Behaviour Support (SWPBS), implementing it in schools and studying its effects. This companion paper to the translated and reprinted research paper by Ohkubo et al (2020; 2022) provides an overview of the educational system in Japan and the issues that students and educators face in educational settings. This paper then describes the introduction and current status of SWPBS in Japan and the adjustments we have made to adapt the approach to Japanese culture and the Japanese educational system. Lastly, the paper discusses future issues and prospects for the practice of PBS in Japan.

Correspondence: Kanako Otsui, Faculty of Integrated Sociology, Kindai University 3-4-1 Kowakae, Higashiosaka City, Osaka, Japan 577–8502 k_otsui@socio.kindai.ac.jp

Japan's educational system

Japan has a nine-year compulsory education system, with six years in elementary school and three years in junior high school. The academic year starts in April and ends in March of the following year, and most schools operate a three-semester school year. Table 1 shows the number of schools and students in 2021 (Ministry of Education, Culture, Sports, Science and Technology [MEXT] 2022a). Place of residence determines the school district for public elementary and junior high schools, and children go to the schools in their district. However, some regions have a system that allows children to choose schools outside of their school districts. In addition to public schools, there also are private schools in Japan, which students must pass an entrance exam to attend. Table 1 shows the number of students per grade or teacher in primary and secondary schools. These are national averages; the numbers tend to be higher in urban areas.

Table 1:	Basic school survey for the academic year
	2021 (The MEXT, 2022a)

School types	Elementary schools	Junior high schools
Number of schools (public)	19,340 (98.4%)	10,077 (91.6%)
Number of students	6,223,401	3,229,707
Number of students per class	22.8	26.9
Number of students per teacher	14.7	13.0

Each class lasts 45 minutes in elementary schools and 50 minutes in junior high schools. Many junior high schools provide after-school activities. Schools allocate permanent classrooms to children as a rule meaning they study with the same classmates in the same classroom. Elementary schools assign a teacher to each class. The teacher in charge of the class teaches all subjects except for specific ones, such as music. In contrast, junior high schools have teachers for each subject area. The teacher in charge of a specific subject area goes to classes and teaches their subject area according to the class timetable. Junior high schools allocate homeroom teachers to classes separately from teachers responsible for their respective subject areas. Homeroom teachers intervene with their students when they behave problematically or provide them with joint counselling with an academic guidance counsellor.

Many schools have special classes and place students who need individual support in these classes. Students who belong to a special class also sometimes take lessons with the students in the regular class. There also is a system of coaching classes for students with special needs. Although students who use this system have most of their lessons in regular classes, they attend coaching classes for lessons that require special guidance.

In Japan, there also are special schools for students with disabilities, such as visual, hearing, physical or intellectual disabilities. These schools provide education to students from kindergarten to high school. Class sizes at special schools are small (six students in elementary and junior high schools and eight in high schools), and the schools have an individualised curriculum to meet the needs of each group.

School personnel consists of: (a) the principal; (b) head teacher and deputy head teacher; (c) teachers in charge of student guidance, nursing and nutrition; (d) clerical staff; (e) a school coordinator; and (f) a school janitor. Other personnel include teachers who serve as homeroom teachers. Although the placement of school counsellors started in 1995, the deployment rate has varied considerably from region to region. They are often part-time clinical psychologists or certified psychologists. Only one school counsellor will be assigned to both the junior high and elementary school in a school district. Thus, schools in Japan do not have a counsellor—or a social worker or behavioural analysis expert—working full time.

Issues in school environments in Japan

Issues surrounding students

The MEXT conducts an annual survey on the problematic behaviour of students. These surveys report the number of cases of violence, bullying, suspension of attendance, refusal to go to school, dropping out of high school and suicide. The number of reports on violence, refusal to go to school and bullying have been rising since 2014 and the increase is particularly noticeable in elementary schools. The MEXT (2021a) reported 41,056 violent incidents in elementary schools in 2020, with the number of occurrences per 1,000 students at 6.5. Regarding the types of violence, the cases between students were much higher than those against teachers and objects. Among 32,283 elementary school students who engaged in violence, only 68 were expelled or suspended from school. Such severe punishment is rarely applied in elementary schools. On the other hand, among 20,424

junior high school students who engaged in violence, 234 were expelled or suspended, and in high schools, 2,981 of the 4,541 students who engaged in violence were expelled or suspended. These data indicate that the older the age of a student, the greater the probability that schools will apply stricter forms of punishment. The fact that the severity of violent acts increases as children become older may be a factor in the increased probability of expulsion or suspension. Cases of bullying also are noticeably high in elementary schools: 420,897 cases were reported in 2020 at a rate of 66.5 cases per 1,000 children. Recent trends include an increase in bullying using personal computers and cell phones.

A problematic behaviour regarded as a social problem for a long time in Japan is futoko (refusal to go to school). The MEXT defines cases in which a student is absent from school for more than 30 days a year as a 'long-term absence'. Futoko refers to a situation in which a student does not or is unable to attend school due to a psychological, emotional, physical or social factor (except for illness or economic reasons, MEXT, 2022b). In the past ten years, there have been more than 100,000 futoko students in elementary and junior high schools every year. In 2020, the number of futoko students was 196,127, the highest number ever recorded. The fact that schools were closed nationwide due to the Covid-19 pandemic may have been a factor. Nevertheless, futoko students comprise the equivalent of 2 per cent of all schoolchildren in Japan. There are more cases of futoko in junior high schools than in elementary schools. According to the MEXT survey conducted in 2020, the most commonly reported causes of futoko are apathy and anxiety (MEXT, 2021a). Therefore, there is a need to address internalising behaviours that challenge as well as externalising ones such as bullying and violence.

The MEXT conducted a fact-finding survey in 2012 on students enrolled in regular classes of elementary and junior high schools who may have developmental disabilities and need special educational support (MEXT, 2012). The survey revealed that those who do not have problems with intellectual development but are considered to have significant learning or behavioural difficulties account for 6.5 per cent of students, which is equivalent to about 2-3 students per class. This proportion is very high in lower grades: 9.8 per cent for first graders and 8.2 per cent for second graders, with an average of 7.7 per cent of students in elementary schools. The recent trend of a sharp increase in challenging behaviours at schoolsespecially in elementary schools-is also likely related to many children having difficulties in school life, as shown in the survey. Among the 6.5 per cent who show significant

learning or behavioural difficulties: (a) nearly 40 per cent did not receive support in the past or were not receiving support at the time; (b) 97 per cent had not received lessons with the rest of the grade; (c) 95 per cent were not enrolled in special classes; and (d) around 85 per cent did not have their support plans developed individually.

Hirasawa, Jinno and Hiroshima (2006) surveyed 696 teachers of regular classes in elementary schools on the 'most worrying/troublesome behaviours'. Survey results identified 14 types of behaviours, including inappropriate conversations and refusal to join class activities. It showed that challenging behaviours in regular classes manifest in many different ways. Baba and Matsumi (2011) analysed the challenging behaviours reported by support staff assigned to regular classes that became the target of support. Their results identified many cases of refusing to follow instructions and of playing with their hands. Although these behaviours are not as severe as those reported in the MEXT's annual survey, they can significantly impact teachers' day-to-day management of classes. According to a study by Clunies-Ross, Little and Kienhuis conducted in Australia (2008), 'talking out of turn' was the most troublesome challenging behaviour that both male and female students engaged in most frequently. Although physical aggression also was a troublesome behaviour, it did not occur very often. Similarly, in Japan, a study reported that students' chatting during class is a problem teachers find stressful (Ando et al 2013). Therefore, it appears that there is a need to address students' behaviours that obstruct their learning environment in schools even if they do not cause serious problems.

It is thought that there also is a complex relationship between the social situation in Japan and challenging behaviours by students. Although the MEXT definition of futoko excludes cases caused by economic reasons, some have pointed out a considerable number of futoko also among children from poorer families (Kajiwara, 2020). In fact, the poverty rate of children published by the Ministry of Health, Labour and Welfare (MHLW) in 2018 was 13.5 per cent; about one in seven children in Japan are thought to be in poverty (MHLW, 2018). The poverty rate of singleparent households is even higher, at 48.3 per cent. The number of consultations on child abuse continues to increase from year to year; in 2020, it exceeded 200,000 nationwide (MHLW, 2020), the highest number recorded. One may consider that such a home environment for children growing up is a likely factor behind their challenging behaviour. Furthermore, the current situation in Japan is that the authorities are not sufficiently reaching out to these families to provide support.

Issues surrounding teachers

According to the MEXT's statistics for 2019, the average age of elementary schoolteachers is 42.6 years and 43.6 years for junior high schoolteachers (MEXT, 2021b). The proportion of teachers under the age of 30 is increasing. The number of teachers who are taking sick leave due to mental health problems is 5,478 (0.59 per cent of all the teachers), a three-fold increase compared to ten years ago. Thus, the mental health of teachers is considered to be in a critical state. According to the Organization for Economic Cooperation and Development's (OECD) 2018 International Teacher Guidance Environmental Survey, the top two reasons for the stress Japanese teachers experience were excessive administrative work and parental demands (MEXT/National Institute of Education Policy, 2020). The survey showed that teachers worked 54.4 hours per week in elementary schools and 56 hours per week in junior high schools, which were the longest among 48 countries surveyed and significantly exceeded the average of 38.3 hours. In contrast, only 15.4 per cent of elementary schoolteachers and 5.9 per cent of junior high schoolteachers participated in study groups or professional development activities to enhance their expertise, which is very low compared to the average of 23 per cent for other countries that took part in the survey. These results suggest that teachers in Japan have limited time to invest in the development of their professional skills.

Fujii (2011) administered a Teacher Worry Scale to 542 teachers balanced across 27 elementary, junior high and high schools and found that two reported causes of teacher burnout were the demands of work and lack of confidence in one's abilities. Given the state of teachers' work environments as shown in the OECD survey, it is not surprising that an increasing number of teachers develop mental health problems. In regard to specific problems, Fujii found that teachers in their 20s reported more problems related to teaching guidance and student counselling compared to teachers in their 50s. Teachers in their 40s reported an increase in emotional instability and decrease in motivation. These results suggest that teachers in their early careers are still not confident enough in teaching guidance and student counselling and many want to upgrade their skills. However, they cannot find sufficient opportunities for professional development due to their busy schedules and appear to lose motivation as they are unable to change their work situation.

Introduction of SWPBS in Japan

Given the problems with Japan's educational environment described above, leaders in education, research and policy recognised the need to build safe and secure educational environments for teachers and students. They acknowledged the importance of responding to students' diverse needs for support, reducing students' challenging behaviours in schools and improving the work environment so that it did not create heavy burdens and stress for teachers. SWPBS was the programme that attracted attention as a response to such needs.

SWPBS has its theoretical basis in applied behaviour analysis (ABA). Japan has a long history of research and practice in the field of behaviour analysis, especially in education and welfare. The Japanese Association for Behaviour Analysis (JABA) was established in 1983 with 161 members. The number of members has increased to 1,058 as of 2022. Given the current number of members, one may reasonably assume that hundreds of educators, social welfare workers and clinical psychologists are engaged in the clinical practice of behaviour analysis in their respective work settings. However, only about 20 Japanese professionals have BCBA or BCBA-D certification. The Japanese Journal of Behaviour Analysis (JJBA) is the Association's academic journal. The journal was started in 1987 and published 1,166 articles in 35 issues by 2020. The journal has published many articles on the practice of ABA with individuals, in the context of group support, and with students in classrooms in schools. From this fact, we can see that ABA has been practiced in educational settings before the introduction of SWPBS in Japan. In 2007, JJBA published a special issue entitled Aiming to Expand the Contribution of Behaviour Analysis to General Education. Following this special issue, educational and clinical practitioners of ABA expanded their practice not only to special support education but also to general education (Ohkubo, 2020). The first report on practicing SWPBS in Japan was Ishiguro (2010) in a junior high school. Since then, the introduction of SWPBS in schools in Japan has gradually increased. A major turning point was the launch of the Japan Positive Behaviour Support Network (APBS Network Japan [APBS-J]) in 2017 as an official network recognised by the Association for Positive Behaviour Support (APBS). Initially, APBS-J had 17 board members, all of whom were members of the Japanese Association for Behaviour Analysis and had careers as experts in ABA. The formation of APBS-J served as an inflection point for the systematic development of SWPBS in Japan. Below, the paper describes the development of SWPBS in Japan over the past five years according to the four stages of implementation, as defined by the discipline

of implementation science: exploration, installation, initial implementation and full implementation (Fixsen, Blasé and Van Dyke, 2019).

Exploration

As noted above, students' needs for support at schools are diverse and behaviour analysts in Japan were conducting school consultations to respond to them. Schools provided individual and collective responses to students' challenging behaviour, as the number of cases they had to respond to increased. However, the problem-solving responses were time-consuming and required significant human resources, which became a challenge. Thus, there was an increasing need for a more preventive approach to addressing challenging behaviour. Backed by the promotion of inclusive education, an increasing number of educators began to emphasise the importance of creating a learning environment that would make lessons easier for students to understand. SWPBS drew attention as an answer for meeting the need to prevent challenging behaviour and set up a universal educational environment.

As a first step in exploring the adoption of SWPBS, in the summer of 2016 we invited a SWPBS trainer from Canada to Japan. The Tokushima Prefecture Department of Education hosted a workshop on SWPBS to familiarise teachers with PBS implemented in schools as a wholeschool approach to the prevention of challenging behaviour. Because Guidance Managers from the Prefectural Department of Education had been implementing school consultations in collaboration with ABA experts for years, key components of the three implementation drivers defined by implementation science (competency, organisation and leadership drivers, Fixsen et al 2005) already were in place. ABA experts working as consultants to the schools functioned as competency drivers. The system of behavioural consultation to schools supported by school principals served as an organisation driver. Guidance Managers from the Department of Education, working to maintain and improve consultative services to the schools by ABA experts, functioned as leadership drivers. Thus, we started to introduce SWPBS to schools in Tokushima Prefecture by expanding the practice of ABA previously conducted with individual students to a school-wide practice. The establishment of APBS-J in 2017 catalysed the spread of this movement to a whole-school approach to other regions of Japan. After learning about the practice of SWPBS and its positive outcomes in schools that had adopted the approach, administrative officers and teachers in other regions of Japan voiced their interest in adopting the approach in their schools as well.

Installation

In Tokushima Prefecture, the Department of Education designated an elementary school as a model school and started introducing SWPBS to this school. The ABA expert who was involved in previous school consultations served as external coaches, coordinating and conducting introductory training at the elementary school. The PBS leadership team consisted of an ABA expert as an external coach, a teacher as an internal coach, school administrators and prefectural Guidance Managers for the school. They held in-school training sessions at the school and the ABA expert introduced PBS and explained how to implement it. After that, they began implementation of SWPBS by establishing schoolwide expectations (rules) and creating a Positive Behaviour Expectations matrix across classroom and non-classroom settings in the school. They carried out the process more or less in the same way that schools in the United States implemented these components of SWPBS (Horner and Sugai, 2015).

In regard to the component of teaching students specific expectations or skills, the elementary school in Tokushima Prefecture implemented a common wholeschool teaching practice in Japan, referred to as a campaign. A campaign is a targeted practice in which a school selects a few skills, in this case from the specific behaviour expectations in the matrix, and conducts intensive training with students. For example, for the school-wide expectation of 'be respectful', a specific behaviour expectation or skill in the classroom was 'looking at your friends and listening to them when they are giving presentations'. With this skill as a campaign, a student committee, comprised of students in upper-level grades and a designated teacher, developed a lesson plan and introduced it to all of the students in the school at meetings and on other occasions. The school then set up a period of training and reinforcement that lasted for several weeks, in which students in each class worked on developing the targeted skill. Members of the student committee gathered and recorded data on the targeted skill, and shared the results at a meeting after the training and reinforcement period was over.

A facilitating factor during the installation of SWPBS in the school in Tokushima Prefecture was school personnel's familiarity with single-case research design, based on their experience of school consultations with ABA experts. They collected observation data on target skills and assessed them using a non-experimental AB (baseline and intervention) design to examine the results of the campaign to teach target skills. The direct observation data collected confirmed that students' targeted skills

improved after the campaign was initiated. Student committee members then met with the student body, visually shared the results in graphic form and provided feedback. By doing so, the first school to implement SWPBS in Tokushima Prefecture treated data on targeted skills as performance indicators. This is in contrast to the use of Office Discipline Referral (ODR) data in the United States as performance indicators. They did so because they found the targeted skills data to be immediately useful. Thus, during the installation stage, the first school in Japan to implement SWPBS at the Tier 1 level developed the campaign as a uniquely Japanese method of teaching behavioural expectations, collecting data and data-based decision-making.

In 2020, the Japanese Journal of Behaviour Analysis published a special issue entitled, 'Frontline of PBS in Schools' in which SWPBS was introduced to the readership through a series of conceptual and research papers written in Japanese on SWPBS. Within this issue, Ohkubo et al (2020) contributed the first empirical case study of SWPBS in Japanese schools. They documented the procedures and outcomes of implementation of Tier 1 SWPBS in the first elementary school in Tokushima Prefecture to adopt and adapt SWPBS.

Initial implementation

After successfully installing core components of SWPBS at the Tier 1 level in one elementary school in Tokushima, the Department of Education in Tokushima Prefecture designated three elementary schools in the town where the model school was located as a model district and introduced SWPBS to four schools. The lessons learned during the installation stage of implementation provided guidance for initial implementation to other schools in Tokushima Prefecture. These lessons included a method of implementing SWPBS, the campaign, which was more suitable to school culture in Japan. Sequential campaigns to teach students target skills served as the central procedure. After schools established school-wide expectations and a Positive Behaviour Matrix, one or two target skills from the matrix were selected each school term and a school-wide campaign to teach the targeted skills was established, with five or six campaigns being conducted each school year.

At this stage in the development of SWPBS in Japan, the method of implementing campaigns to teach target skills varied from school to school. In some schools, the student committee played a central role, while in other schools, students in higher grades assumed responsibility for teaching target skills to students in lower grades. Although some schools in Japan used tickets as economic tokens from which children received back-up reinforcers, many schools treated tickets as a reinforcer on its own. For example, in some schools, students who demonstrated target skills were given tickets that included positive messages written by other students or by teachers. Because teachers in many schools in Japan did not feel comfortable delivering tangible rewards to students, the acknowledgment component of SWPBS was adapted to better suit the culture of these schools.

As of 2022, educators in schools in Japan are implementing SWPBS in various ways, informed by the culture of the school and Japanese society, with a focus on Tier 1 support. Japanese researchers, in collaboration with schools, are conducting additional studies to examine the effects of SWPBS on student behaviour and school climate. In addition to gathering data on target skills during school-wide campaigns, they also are examining the effects of SWPBS across multiple schools on: (a) school liking and avoidance by students using a Japanese version of the School Liking and Avoidance Questionnaire (SLAQ; Otsui et al, 2013); and (b) student behavioural health using the Japanese version of the Strengths and Difficulties Questionnaire (SDQ, Noda et al 2013).

To facilitate the expansion of schools implementing SWPBS beyond the model district, Tokushima Prefecture created a series of pamphlets for implementing SWPBS in other schools in Tokushima Prefecture as well as other regions of Japan. As of March 2022, 76.2 per cent of the 343 schools in Tokushima Prefecture, including kindergartens, children's centres, elementary and junior high schools, have implemented SWPBS at the Tier 1 level. Outside of Tokushima Prefecture, the number of schools in Japan implementing SWPBS has reached approximately 400.

Full implementation

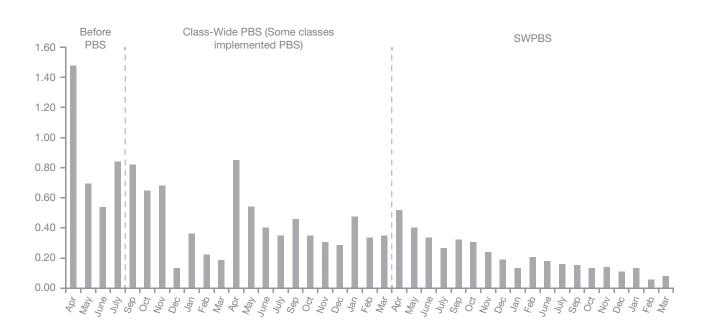
Since schools in Japan have not fully implemented the practice of SWPBS across all three tiers, this section of the paper addresses current efforts to reach the stage of full implementation. As more schools have adopted SWPBS, the need to assess implementation fidelity has arisen. To address these needs, members of APBS-J created a Japanese translation of the Tiered Fidelity Inventory (TFI) (APBS Network—Japan, 2022; Otsui, Niwayama and Tanaka, 2020). When doing so, they adjusted the terminology to make it more suitable to the Japanese educational system and culture. The TFI

has made it easier for schools in Japan to introduce SWPBS to their school at the Tier 1 level, as they can assess what is already in place and what they need to do to begin implementation of SWPBS. Schools that already have implemented SWPBS use the TFI every year as a tool to assess implementation fidelity and determine areas that need further improvement for the next academic year.

To further support the full implementation of SWPBS in Japan, APBS-J is developing an electronic application (app) for collecting data on challenging behaviour of students, as there is no data equivalent to ODR in Japan. Currently, we are developing three versions of the app for iOS, Windows and Windows Desktop so that schools can choose the most suitable one according to their equipment and communication environment. This application enables teachers to enter cases of children's challenging behaviours in a format similar to the School Wide Information System (SWIS) (Irvin et al 2006) used in the United States to immediately output graphs in various patterns, such as by student, location and month. Since it is for in-school operations only, it

is designed for decision-making based on a school's internal data, rather than gathering data from multiple schools on a shared server. Figure 1 shows the use of the application to track changes in the monthly occurrence rate of challenging behaviour in a Japanese school across a three-year period (Tanigawa and Niwayama, in press). The decrease in challenging behaviour after the introduction of SWPBS appears to indicate that the data on challenging behaviour, similar to ODR, is also effective in Japan as an indicator of behaviour change. At the same time, since our application, which is similar to SWIS, primarily measures externalising behaviour, it has the disadvantage of not being able to adequately recognise internalising behaviour, such as anxiety and apathy, that exist behind futoko, an issue drawing attention in Japan. Therefore, APBS-J is examining whether we can identify internalising behaviours by using the app to gather data on students' use of their school infirmary. Tentative evidence of the potential utility of this additional measure derives from a recent report from a school in Tokushima Prefecture that the number of cases of children using their infirmary for psychological issues decreased after the introduction of SWPBS.

Figure 1: Changes in number of cases of student guidance identified through ODR app by time of year (Tanigawa and Niwayama, in press)



Through the development of Japanese versions of TFI and ODR apps, we hope to establish a foundation for schools to make data-based decisions while practicing SWPBS. At this stage in the development of SWPBS in Japan, since classroom teachers are inexperienced in using such data, it is necessary to prepare them through further training so that they can analyse data and make data-based decisions during regularly scheduled meetings. Although teachers play highly significant roles in education and society in Japan, they work in an extremely difficult environment and do not receive sufficient social recognition. One reason why many teachers in Japan leave the profession is because their achievements with students are not immediately visible. Data-based assessment and decision-making may prove to be essential processes for improving teachers' work environment in Japan, and restoring a feeling of accomplishment and reward in working in the profession.

Issues concerning SWPBS in Japan

In this final section of the paper, three issues in the practice of SWPBS in Japan that are still in the development stage are discussed: (a) ensuring an effective and sustainable system of SWPBS; (b) implementing Tier 2 and Tier 3 supports; and (c) continuing to adapt SWPBS in ways suitable to Japanese culture.

Ensuring an effective and sustainable system of SWPBS

A major challenge that we face is the creation of a system that enables the effective and continuous implementation of SWPBS in schools in Japan. In public schools in Japan, school personnel change at a steady rate because administrators and teachers are assigned to different schools every 3-5 years. Therefore, it is necessary even for a school that has been effectively implementing SWPBS to re-confirm and re-establish basic knowledge of SWPBS among teaching staff every academic year. The TFI can be conducted each year to facilitate yearly training and support to new and continuing school personnel. Results can then guide staff training and support activities aimed at maintaining and improving the fidelity of implementation of core components of SWPBS, as well as a school culture of commitment to a preventative, whole-school approach to behaviour support.

As more and more schools implement SWPBS, we also have an increasing need to create a support system for SWPBS in each school district, municipality and prefecture. To this end, in 2021, APBS-J created Japanese versions of the District Systems Fidelity Inventory (DSFI) (Centre on Positive Behavioural Interventions and Supports, 2019) and the State Systems Fidelity Inventory (SSFI) (Center on Positive Behavioural Interventions and Supports, 2019). Given these assessment tools, it is now possible to conduct not only a school-based evaluation of SWPBS implementation fidelity, but also a municipality- and/or prefecture-based evaluation of the fidelity of implementation of policy and administrative supports for SWPBS at the municipal and prefectural levels. In Tokushima Prefecture, for example, municipal and prefectural Guidance Managers are proactively promoting SWPBS in their prefecture, informed by data from the Japanese versions of the DSFI or SSFI. In collaboration with other prefectures in Japan, we have begun to use the DSFI and SSFI on a trial basis to examine district or prefectural initiatives designed to support the implementation of SWPBS, such as a training system implemented by a prefecture's Department of Education.

Implementing Tier 2 and Tier 3 supports

A second issue that needs to be addressed in regard to the implementation of SWPBS in Japan is the current almost exclusive focus on Tier 1 support. Very few schools are implementing SWPBS in its complete form, including Tier 2 and Tier 3 supports. Since the realisation of inclusive education remains a significant challenge in Japan, there is a need to create an effective system that supports the implementation of all three tiers of SWPBS. In addition, the practice of SWPBS remains within a school environment and does not currently extend to homes and communities. Such an extension of positive behaviour support may lead to solutions to child and youth challenging behaviour associated with abuse and poverty. The practice of PBS beyond school settings may contribute to environments in which whole communities play an active role in raising children who develop and thrive to the best of their ability.

Adapt SWPBS in ways suitable to Japanese culture

The last issue that we face in regard to the full implementation of SWPBS is ensuring that the expansion of PBS to schools throughout Japan is done in ways that are suitable to Japanese culture. As described above, the installation and initial implementation of SWPBS in schools in Japan over the past five years have included adaptations to suit the Japanese school system and culture. We believe that it is essential to promote SWPBS in a form appropriate to Japan's education system and cultural values. Doing so will continually enjoin us to incorporate essential components of SWPBS from overseas models while at the same time adapting these components so that they are culturally acceptable and feasible to school personnel, students and parents. We anticipate that the expansion of SWPBS to schools throughout Japan will prompt a significant shift from the way education has been provided in Japan, not only in terms of specific methods but also educational philosophy. For this reason, we will continue to explore cultural suitable forms of SWPBS so that PBS will take root in Japan as a new educational system that is uniquely Japanese.

References

Ando, K, Nakashima, N, Chung, Y and Nakajima, K (2013) Research on homeroom teachers' 'stress-coping' as it relates to elementary school class-management. *Kawasaki Medical Welfare Journal*, 22, 148–157.

APBS Network Japan (2022) *Japanese version of SWPBS Tiered Fidelity Inventory (TFI)* version 1.1. Available at: https://pbsjapan.com.

Baba, C and Matsumi, J (2011) Special education support based on applied behavior analysis in regular classrooms, *The Journal of the Literary Association of Kwansei Gakuin University*, 61, 100–114.

Center on Positive Behavioral Interventions and Supports (2019) *Positive Behavioural Interventions and Supports District Systems Fidelity Inventory (DSFI) – Pilot version 0.1.* Oregon: University of Oregon.

Center on Positive Behavioral Interventions and Supports (2019). *Positive Behavioral Interventions and Supports State Systems Fidelity Inventory (SSFI) – Pilot version 0.1.* Oregon: University of Oregon. Retrieved from www.pbis.org.

Clunies-Ross, P, Little, E and Kienhuis, M (2008) Self-report and actual use of proactive and reactive classroom management strategies and their relationship with teacher stress and student behavior, *Educational Psychology*, 28, 693–710.

Fixsen, D L, Blase, K A and Van Dyke, M K (2019) *Science and implementation*. North Carolina: Active Implementation Research Network. Retrived from: www.activeimplementation.org/resources.

Fixsen, D L and Naoom, S, Blase, K, Friedman, R and Wallace, F (2005) *Implementation research: A synthesis of the literature FMHI Publication 231*. Florida: University of South Florida, The National Implementation Research Network.

Fujii, Y (2011) How can we identify and support teachers with worries? – Development of the 'Teacher Worry Scale', *Journal of Mental Health School*, 14, 61–72.

Hirasawa, N, Jinno, Y and Hiroshima, S (2006) Questionnaire survey on mild developmental disabilities with behavior problem in elementally regular class: Characteristic of most difficult behaviour across a school year and a diagnosis, *Annual report of the Faculty of Education, Gifu University of Humanities and Social Science*, 55, 227–232.

Horner, R H, and Sugai, G (2015) School-wide PBIS: An example of applied behavior analysis implemented at a scale of social importance. *Behavior Analysis in Practice*, 8, 80–85.

Irvin, L K, Horner, R H, Ingram K, Todd, A W, Sugai, G, Sampson, K and Boland, J B (2006) Using office discipline referral data for decision making about student behavior in elementary and middle schools: An empirical evaluation of validity, *Journal of Positive Behavior Interventions*, 8(1), 10-23. https://doi.org/10.1177/10983007060080010301.

Ishiguro, Y (2010) A study of the order recovery program for a public school by means of the applied behavior analysis, *Japanese Journal of Educational Counseling*, 3, 56–67.

Kajiwara, K (2020) Trends and issues of research on absenteeism among children from disadvantaged families in Japan, *Japanese Journal of Social Welfare*, 61, 59–70.

Ministry of Education, Culture, Sports, Science and Technology (MEXT) (2012). *Results of a survey on students with special educational needs with possible developmental disabilities enrolled in regular classrooms*. Retrieved from: https://www. mext.go.jp/a_menu/shotou/tokubetu/material/__icsFiles/ afieldfile/2012/12/10/1328729_01.pdf

Ministry of Education, Culture, Sports, Science and Technology (MEXT) (2021a). *Results of a survey on challenging behavior, truancy, and other student guidance issues in 2020.* Retrieved from: https://www.mext.go.jp/ content/20211007-mxt_jidou01-100002753_1.pdf.

Ministry of Education, Culture, Sports, Science and Technology (MEXT) (2021b). *Release of the school teachers' statistical survey (finalised) in 2019.* Retrieved from: https://www.mext.go.jp/content/20210324-mxt_chousa01-000011646_1.pdf.

Ministry of Education, Culture, Sports, Science and Technology (MEXT) (2022a). *Basic school survey in 2021*. Retrieved from: https://www.e-stat.go.jp/stat-search?page=1a ndlayout=datasetandtoukei=00400001.

Ministry of Education, Culture, Sports, Science and Technology (MEXT) (2022b). *Survey on student guidance issues such as challenging behaviour and truancy - Explanation of terminology*. Retrieved from: https://www.mext.go.jp/b_menu/toukei/chousa01/shidou/yougo/1267642.html.

Ministry of Education, Culture, Sports, Science and Technology (MEXT) and National Institute for Educational Research (NIER) (2020). *Key points from the OECD teaching and learning international survey (TALIS) 2018 report vol. 2.* Retrieved from: https://www.mext.go.jp/b_menu/toukei/ data/Others/__icsFiles/afieldfile/2020/20200323_mxt_ kouhou02_1349189_vol2.pdf

Ministry of Health, Labour and Welfare (MHLF) (2018) Income, etc. of various types of households. Retrieved from: https://www.mhlw.go.jp/toukei/saikin/hw/k-tyosa/k-tyosa19/ dl/03.pdf

Ministry of Health, Labour and Welfare (MHLF) (2020) Number of cases of child abuse consultations handled at Child Guidance Centers in 2020. Retrieved from: https://www.mhlw.go.jp/content/000863297.pdf.

Noda, W, Ito, H, Harada, S, Nakajima, S, Takayanagi, N and Someki, F (2013) Examining the reliability and validity of the Japanese version of the Strength and Difficulties Questionnaire self ratings form using the entire cohort data in one suburban city in Japan. *Japanese Journal of Clinical Psychiatry*, 42, 119–127.

Ohkubo, K (2020) Frontline of adoption of positive behavior support in Japanese schools. *Japanese Journal of Behavior Analysis*, 34, 162–165.

Ohkubo, K, Tsukimoto, H, Otsui, K, Tanaka, Y, Noda, W and Niwayama, K (2020) Effectiveness and social validity of Tier 1 intervention with SWPBS in a public elementary school. *Japanese Journal of Behavior Analysis*, 34, 244–257.

Otsui, K, Hotta, M, Takeshima, K and Matsumi, J (2013) Development of a Japanese version of SLAQ: Exploring factors contributing to children's school adjustment and their relationship with depression. *Annual Report of the Japanese Association of School Psychologists*, 6, 59–69.

Otsui, K, Niwayama, K and Tanaka, Y (2020) Japanese version of SWPBS Tired Fidelity Inventory. Available at: https://apbsjapan.org/.

Tanigawa and Niwayama, K (in press) School-wide positive behavior support on students' problem behaviours in a Japanese public middle school: Implementation fidelity and rates of problem behaviours over 4 years. *Japanese Journal of Behavior Analysis*.