

Volume: 3, Issue: 1 / July 2018

Under Pressure: Why School Managements Use

Garbage Can Model of Decision?

Emanuel Tamir

Ohalo College of Education, Katzrin, Ramat HaGolan, Israel Mirit K. Grabarski

Ivey Business School at Western University, London, ON, Canada

Abstract	Article Info
This qualitative study identified and analyzed the occurrences of the Garbage-Can decision making model in public schools. The	Article History:
study was based on semi-structured interviews with 34 teachers from elementary and middle schools in Israel. Data analysis showed three major decision areas in which the Garbage-Can model was employed, and the conditions under which these	Received September 19,2017 Accepted February 15, 2018
decisions were made. Specifically, salient occurrences of Garbage-Can decisions making were found regarding pedagogical decisions, opportunities to obtain additional resources, and change management. The main conditions that evoke the use of the model are administrative limitations which create pressure and ambiguity, and time limits which do not allow systematic decision making. Results of this study may inform school principals and policy-makers when making decisions in schools.	Keywords: Garbage can decision model School management Public schools
Cite as:	

Tamir, E. & Grabarski, M. K. (2018). Under Pressure: Why school managements use garbage can model of decision? *Research in Educational Administration & Leadership*, 3 (1), 1-28. DOI: 10.30828/real/2018.1.1 R E A L

Introduction

Every day school principals make many administrative, pedagogic and political decisions. Since school managements practice policy that is determined from above by the Ministry of Education and also by middle management, through decisions that are intended to apply the policy, it is interesting to investigate how these decisions are made.

On the one hand, there is an expectation that school principals will make each decision through a rational and systematic process, understanding each problem in depth, examining many alternatives and choosing the optimal alternative. On the other hand, academic and professional literature on school management (Hoy & Tarter, 2008; Oplatka, 2010) is aware of the existence of a decision-making model that is irrational. However, the literature deals with this model in brief, because it is considered undesirable. The study discussed in the present article aims to examine whether this model, known as the Garbage Can decision-making model (Cohen, March & Olsen, 1972, 1974, 2012) exists in Israeli elementary schools and to identify the situations in which it is likely to be used.

The Garbage Can model was identified by Cohen, March and Olsen (1972) as an alternative decision-making process to rational decision-making, when circumstances prevent the use of rational thinking. The decision-making process in these situations appeared to be suboptimal, its results were usually unsatisfactory – but the authors believed that this was a process that often characterized the decision-making of most public institutions, especially educational institutions (Ibid.).

This argument was tested in several studies, especially in the first years after the presentation of the model (Christensen, 1976; Eisenhardt & Zbaracki, 1992; Kreiner, 1976; Murphy, Vriesenga & Storey, 2007; Weiner, 1976). After this, interest in the model diminished; nevertheless, although not much research was devoted to this model, this does not mean that it did not continue to be used.

The education system was and still is a complex arena, full of opportunities for decision-making but also full of pressures. School principals are required to provide many decisions without always having sufficient tools and possibilities for systematic thinking. In the present study, we would like to examine decisions made in an unsystematic manner and to identity the situations in which these decisions are made – characterizing the areas in which such decisionmaking takes place and pointing up the common factors that led to this manner of decisions. The research employed qualitative methodology, interviewing 34 teachers that hold additional educational roles (e.g. coordinators for specific disciplines) who could shed some light on irrational processes, hasty decisions and unsuitable solutions.

Although school principals are expected, as those responsible for public funds and the education of future generations, to make intelligent decisions, there is often a gap between this expectation and the decisions that are made in practice. This gap needs to be noticed and understood. If suboptimal decisions are made under certain conditions that restrict the principals' abilities to think systematically, then the conclusions of the present study may be useful to inform policy-makers at higher levels to pay attention and to allow schools the necessary time and conditions to employ systematic decisionmaking for the implementation of policy that can further the main goals of the education system.

Theoretical Background

Many of the activities of school principals involve decisionmaking (Calabrese & Zepeda, 1999). These decisions may relate to educational content and teaching methods, or to administrative aspects such as the distribution of authorities and resources such as teaching and learning materials, manpower and budgets (Caldwell & Spinks, 1992). In the administrative dimension, principals may also make decisions concerning various issues such as coordination of procedures and planning (Nir, 2000), staff management (Klein, 2012), the staff's professional development and marketing of the school (Oplatka, 2007). In the educational dimension, decisions may go beyond the integration of learning contents in the regular program, for example relating to the introduction of changes and assimilation of reforms in the education system (Tamir & Shaked, 2016).

These decisions may be made in interactions with students, teachers, parents, local government entities, government ministry bodies and those who give different services to the school (Moos, Krejsler, Kasper & Brandt, 2005; Wang, Gurr & Drysdale, 2016). Since some of the decisions go beyond the regular issues on the school's agenda, principals sometimes have to consider the cultural expectations of the local community that conflict with the state's demands (Arar & Oplatka, 2011). The literature even provides evidence that the school's commitment to the community may engender decisions that are unethical (Arar, Haj, Abramovitz, & Oplatka, 2016).

In order to cope with these situations, school principals rely on their personal experience and the community's accepted norms when they search for relevant alternatives in their decision-making (Polka, Litchka, Mete, & Ayaga, 2016), translating the government's declared policies by reading, writing and speaking according to contextualized practices and seeing themselves as entitled to translate the policies in creative ways according to the circumstances that they experience (Ball, Maguire & Braun, 2012).

An additional consideration that influences the decision-making process is the principals' desire to leave their "thumbprints" i.e. to show that they are doing something significant during their period in the role (Schechter & Shaked, 2017). When the school management is required to produce a significant change, for example during stateinitiated reforms, they are forced to maneuver between conflicting demands on the one hand (ibid.) and the needs and capabilities of their teaching staff on the other hand (Gawlik, 2015; Baglibel et al., 2014). The desire to demonstrate progress in the search for solutions



to problems, against the complex and vague background often prevalent in organizations, often leads to behavior whose purpose is to create an image of active people "rummaging" for a solution in the data, even if it is not relevant for the studied problem (Noppe, Yager, Webb & Sheng, 2013).

The Garbage-Can model

Principals are motivated by different considerations in their decision-making and these processes are not always accompanied by a systematic search for solutions. The Garbage Can model described by Cohen, March & Olsen (1972, 1974, 2012) provides an interesting theoretical framework for the analysis of this phenomenon when conditions do not allow for rational decision-making processes (Hoy & Tarter, 2008; Janis & Mann, 1977); for example, in situations that are vague and uncertain, organizational conditions in which the procedures and order of priorities are unclear, and there is turnover of decision-makers - a situation that Cohen, March and Olsen (1972) call "organized anarchies". Decisions may then be made in an alternative manner, i.e. in an irrational manner.

Instead of a systematic flow of problems and processes of finding appropriate solutions for each problem, four inter-dependent "streams" are described as arriving separately at the Garbage Can and they may appear in different combinations. The four streams that were identified are: (1) problems that require a solution, (2) solutions – that are often found even before the problem which they suit is presented, and without them being able to be meaningful for problems that arise (3) participants in the decision-making process (4) choice opportunities – crossroads for decision (Cohen, March & Olsen, 1972; Cohen, March & Olsen, 2012).

Since the streams reach the Garbage Can in a random manner, that is not orderly, decisions that are made at points when a solution of some sort connects with some sort of problem are also not orderly and they arise by chance, when the results seem to be unexpected (Padget, 1980; Sager & Rielle, 2013). Thus for example, there are problems that wait for a solution for a long time, and eventually instead of receiving a solution they are left without a solution (a situation known as "flight"). Sometimes the existence in the system of solutions that await problems leads to decision-making involving forced adaptation of alternatives that are not connected to the problem and do not really solve them ("oversight"). A situation in which a problem spontaneously connects with a suitable solution is known as a "resolution" and although this is relatively rare given the lack of order prevalent in the education system, due to the conflicting interests of participants and vagueness, the model allows us to understand how sometimes in such a situation these decisions do work. Nevertheless, it is important to note that most of the problems in the system are not solved and the model mainly sheds light on suboptimal decision-making processes (Cohen, March & Olsen, 1972, 1974, 2012).

The present study used the Garbage Can Model to examine decisions of public school managements. Schools were at the forehead of the first wave of research in the 1970s that examined the use of the Garbage Can model (Christensen, 1976; Kreiner, 1976; Pinfield, 1986; Weiner, 1976). Later this model was applied to analysis of decisions in the general public sphere (Cohen & Karatzimas, 2016; Saxonberg & Sirovátkaa, 2014) and in relation to specific cases such as the medical sector (Paton, 2014), and in the context of efforts to cope with alcohol abuse (Sager & Rielle, 2013) and in IT projects in developing states (Zhu & Kindarto, 2016). In the present study, we return to investigate situations in which managerial decisions are made in the education system, in other words we investigate when and with regard to which decisions do the school managements turn to the use of the Garbage Can model.

Research Context

The current study focused on Israeli elementary and junior high schools. The national school system in Israel serves about 1.6 million students. The system is divided into Jewish and Arab systems with

approximately 73% in the Jewish system and 27% in the Arab system (Israeli Central Bureau of Statistics, 2013). The majority of the children in Israel are integrated within the state education system (public education), which is characterized by increasing privatization and is highly centralized (Inbar, 2009). On one hand it declares commitment to innovation in pedagogy, but on the other hand, little is done to provide actual autonomy to implement policies with sufficient degrees of freedom, as expected in self-based management (Volansky, 2003).

Most of the public education budget in the State of Israel is transmitted to the state education system, distribution of the resources is influenced by the specific needs of the school, irrespective of academic results and the school's performance, mainly based on socio-economic criteria (Ben David-Hadar & Ziderman, 2011; Blass, Tsur & Zusman, 2010). The curriculum is relatively conservative and centralized (Inbar, 2009; Naveh, 2011) During the first decade of the 21st century, two educational reforms, "New Horizon" and "Courage to Change", were gradually implemented in Israel's state schools - starting in 2008 and 2011 respectively. These reforms included auxiliary resources in the form of "individual" teaching hours to be exploited according to the management's discretion, so that the principals needed to make complex decisions effective immediately, determining how to use these teaching hours (Tamir & Shaked, 2016).

Method

The goal of the current study was to explore whether there was evidence of Garbage-Can decision-making in schools, and to understand which kinds of decisions were prone to lead to this form of decision making. Because of the nature of the topic, qualitative methodology was selected for the present study in order to identify examples of the Garbage-Can model and categorize the examples according to common themes (Mertens, 2005). Using qualitative methodology allowed us to produce rich textual descriptions of the complexities involved in decision-making, and to interpret respondents' different meanings and perspectives regarding the studied topic (Taylor, Bogdan & De Vault, 2016; Patton, 2002). The research was narrative-based, focusing on individuals' subjective interpretations and the meanings they make of their experiences (Elliott, 2005).

Participants

The respondents were 34 teachers from elementary (n= 22) and junior high schools (n=12) in Israel. 20 teachers were from state secular schools and 14 from state religious schools. 24 of the teachers were female, 10 male, mean age = 41 (range = 30-59), 12 years' average teaching experience (range 7-35 years). 27 of the teachers were Jews, 4 Arabs and 3 Druze. These respondents represented a variety of schools from different areas, in line with recommendations for maximal heterogeneous sampling (Creswell, 2014) so that a wide range of behaviors and perspectives could be identified (Merriam, 2009). While the study employed maximal heterogeneous sampling, no differences in findings were found in interviews of teachers from various backgrounds and personal characteristics. The decision to interview mainly teachers (only one deputy principal was included) regarding managerial decision-making was because of the sensitivity of the topic, which had potential to create a social desirability bias. We assumed that principals might not want to admit to nonsystematic decision-making. The decision to focus on lower age groups was due to the fact that senior high schools in Israel have relatively organized curriculum and missions, they focus on final exams and try to refrain from additional projects so there is little variation between them. Elementary and junior high schools on the other hand provide ample opportunities to identify characteristics of "organized anarchies" because they are less achievements-oriented and have less structured educational goals.



Data Collection

Data was collected from 34 semi-structured interviews between February and June 2016. We explained the purpose of the study to the respondents and asked for their explicit agreement to the process, emphasizing their option to quit at any time. Respondents were asked to give examples of random, accidental decision-making; decisions that were made under conditions of strong ambiguity and/or urgency; cases in which the solutions did not seem to be linked with problems or in which solutions preceded problems. The interviews lasted between 30-80 minutes, each interview was audiotaped with the respondent's permission and later transcribed by a research assistant.

Data Analysis

Data analysis was a three-stage process – selecting, coding and categorizing. Out of the 34 original interviews that provided examples of decision-making, we selected those that fit the Garbage-Can model by establishing the existence of an "organized anarchy" as the pre-condition of the use of this model, according to three criteria: fluid participation, unclear decision technology and problematic preferences. Each case that was selected was analyzed on four dimensions: problems, solutions, participants and choice opportunities (Cohen, March & Olson, 1972). This stage was theorydriven because we adhered to a-priori codes that allowed us to decide whether the case could be classified as an instance of Garbage-Can decision-making. During the second stage, we coded the selected interviews according to a classification of decision types (Tracy, 2013). This stage was data-driven because we classified the decision areas into practical categories - content, administration etc. Finally, we clustered similar observations together and found overarching themes, e.g. dominant types of decisions that were made using the Garbage-Can model.

The analysis was performed independently by both authors, who come from different backgrounds and provided different points of view. One of the authors is an educational administration researcher with extensive work experience in the Israeli educational system, and the second author specializes in business administration and has vast knowledge of research methods in social sciences. Both authors have a deep understanding of the research on decision-making. Our collaboration allowed us to be more conceptually precise and rigorous with methodology as we shared our individual findings, provided critique to each other and reached consensus in each part of the process.

Findings

The data analysis yielded three main types of decision-making, described by the interviewees as those in which the Garbage Can model was employed by the managements: decisions regarding pedagogic aspects, decisions relating to resources and decisions made during the implementation of reforms. The interviewees described how under certain conditions these types of decision were characterized by unsystematic determination processes and the results were, in the main, unsatisfactory. All names given in the following description of the findings are fictive.

Pedagogic Considerations

Pedagogic coping is the focal point of a school's educational activity and school managements are required to make decisions with broad pedagogic significance for the students and the surrounding community. Nevertheless, often the process of decision-making produces unsatisfactory results. Thus, for example, with regard to Project Based Learning that has begun to be popular in Israeli schools in recent years, necessitating a new educational process that alters the teaching method, the decision-making process for its implementation did not permit thorough planning. A mathematics coordinator (aged 41, 15 years teaching experience) described the dynamics of unsystematic decision-making:



There are decisions made in this case and they usually occur because there is a need to react in that same moment, when an unplanned situation is created. In fact, most of our school's decisions are automatic because our work is always performed under pressure. For example, the decision to perform investigative projects in the classes was made without any prior deep [preparatory] work, not even with a small school staff and also not with the larger staff. I and my staff did not think that the projects were suitable for students in Grades 1-3. We understood that the management wanted us to present it to the parents on Parents' Day. And actually, I didn't really understand what we should do and there was a lot of frustration.

The choice of Project Based Learning was experienced by the staff as a random decision under conditions of organized anarchy – at the head of the order of priorities stood the desire to make an impression. The participants who made the decision were not the professionals who would have to implement it. The technology, in other words the procedure, was unclear. The staff did not understand the decision and they were required to implement it without understanding why and how to perform it. This can be seen as a process that was parachuted in from above, that was perhaps irrelevant or unsuitable for the school, and that the school was unwilling to implement – an enforced solution to problems that perhaps did not exist at the given time.

Another example given by an interviewee related to a pedagogic decision. It involved a different type of pressure exerted by parents and the education system. Nili, a homeroom teacher (age 53, 25 years' experience) described the decision made in the class next to hers:

A student from a senior year group who exhibited many behavioral difficulties, disturbed the lessons in his class. It was impossible to expel him from the school and transfer him to another school because of the Students' Rights Law. When his behavior reached a climax, in a school discussion on another subject, it was decided that students from Class 6 would assist the work in the library. And then, in February, in a short meeting about the student's behavior with his parents, who were summoned at short notice to the principal and the homeroom teacher, it was suggested that the student should serve as a librarian, apparently, he would be the first student to help in the library. In

R E A L

this way, they would actually distance the student from the class, but not from the school, which is a far more complicated process. They also envisaged that they would be able to employ him for many hours in the library. They did not try to investigate other ideas such as individual tutoring, psychological diagnosis and support. In my opinion, this solution is unrealistic. It does not solve the problem of the students' behavioral problems, even making them worse, because from his viewpoint, the student saw this as a prize.

This was a complicated issue for the school management and it wanted to reach a state of "industrial peace" and to get rid of the problem that had concerned the school for some time without any solution (an "oversight"). The student studied for six years in the school and finding him an alternative framework would be a complex process, and from the school's viewpoint the student would very soon be completing his studies in the school and become a challenge for another school. Thus, deciding on a step that would buy time until the problem became noisy or perhaps would be reduced, without knowing how, seemed reasonable. Also, the opportunity to rely on another decision to employ students to assist in the library, was tempting and accessible. Nevertheless, according to the interviewees, this decision did not solve the problem and the solution chosen simply in order to do something was inappropriate. Thus, hasty pedagogic decisions both at the collective and individual sensitive levels without any serious consideration can sometimes be made in a way that can be interpreted as random.

Resources

Many interviewees described situations in which schools were offered opportunities to receive resources above the planned budget, which they had to accept in a limited time. This mostly happened at an inconvenient time, for example at the end of the school year. Thus, tension was created between the school's desire to attain the additional resources, an opportunity that might not arise again, and the lack of availability of the management to cope with the situation since they were involved in other issues. The urgency and



uncertainty often led to hasty unsystematic decision-making, with suboptimal results.

Galit, (a veteran homeroom teacher age 49, 23 years' experience), who worked in a school that included children defined as needing special education explained this phenomenon:

Last year we received a budget from the Ministry of Education to boost mathematics and sciences teaching. We knew that we had to exploit the money. We met, the sciences coordinator, the year coordinator and I and someone suggested creating a special room. It was close to the annual outing with all the intensity that it involves, so we immediately agreed to the idea. We didn't want to miss it, we didn't study the matter in depth, or take any advice that day, and immediately after that we told the Ministry of Education about our intention and within a few days we sent them the plan. We decided to invest in a room, to turn it into a sort of supermarket for mathematics teaching. A lot of money was invested in equipment. But no one uses the room today. Although we sometimes go in there with students, it's not used for learning mathematics.

This description reflects the dynamics of participants that deal with many subjects and encounter a clear opportunity to receive additional resources for their school. Because of the untimely appearance of the opportunity, and the need to make an urgent decision, they decide to assign the resources to the creation of a special physical space for teaching. The decision-makers do not discuss other problems that can be solved with the additional funds, for example the need for learning aides; nor do they discuss different alternatives rather they immediately accept the first idea that is suggested without examining the need for this special room. This room therefore represents a solution awaiting a problem that may appear in the future (for example a need for a separate space). But in practice, it seems that it may be a solution that was chosen before the problem appeared.

Another decision focusing on resources was also made when the school was given an opportunity that it did not expect and, in this case, too, the educators were very busy. Since this happened at the end of the school year, they were focused on end of year processes, parting from Year 6 graduates, end of year parties and writing student evaluations. This was explained by Sara, a year group coordinator (age 39, 10 years' experience):

When the local government contacted us, the management understood that it was possible to receive money to improve the school's external appearance. The budget arrived from the local government and from a benefactor. The decision was taken quickly, a moment before we broke up for the summer holidays when everyone was impatient, already wanting to go away and finish the year. Noone wanted to lose the funds. They could invest in a library that we really need, but under the pressure that was then in the school they did not do that, possibly because they thought that solution would be more acceptable. In a hasty meeting of the management with another one or two teachers who were available at that moment, they suggested the idea of installing some contraptions in the school yard that are supposed to operate according to the concepts of Gardner (realization of multiple intelligences), because that would look good. A teacher who had just learnt about this model was at the meeting. In the school yard there are now various installations, in a corner and many good intentions. I think they invested NIS125,000 (approximately \$31,000), they should have thought more seriously about it.

The pressure and work load that the school is involved in at the end of the school year, while educators are intensely involved in academic work, coincided with the sudden opportunity that was presented and that the school did not wish to lose. This led the decision-makers to make a rapid, unsystematic decision together with chance participants. Their order of priorities for the funds is unclear, the discussion is hasty and without any depth regarding investigation of alternatives (for example, a needed library) and this again leads to a decision that does not solve problems but rather awaits them.

Coping with Changes

The school was required to cope with changes and this was expressed by the interviewees as a need to make decisions at the local level relating to changes that were enforced upon them and introduced top-down to the staffs. In some cases, decision-making



was a kind of policy confirmation with secondary decisions concerning the manner in which the changes would be implemented. In the following example, described by Yaara, a home-room teacher (aged 30, 6 years' experience, the school could decide to reject the introduction of the program, but because resistance has a price of its own, the decision was accepted and the staff were told to work according to the new instructions, often without any support and guidance:

"Impositions" are dropped on us from above, when ministers change, and new policies are created. It then goes through an accelerated decision-making process in the school, that actually only confirms the process or program, and there are not many other alternatives. Although the policies are imposed on the field, to the teachers and students, we don't really understand why we have to implement them. For example, in the Heart Key program [for the development of social skills in school], the teachers didn't understand what was the connection with the specific month of the year and the value that they were asked to focus on in their work with the students. And they certainly did not understand why they should only focus on the subject for one hour a week. It was artificial, unpopular and incomprehensible. We had to implement what they said without understanding why, and that was also how it looked from the very first moment.

The decision that the teacher presented was a constricted confirmation, representing what is described as an "oversight", an enforced solution. The need to develop social skills is one of the school's duties, and the arena where this subject should be addressed is actually in the informal arena, during the breaks, in reaction to difficulties and distress that emerge during the day and after formal study hours. Allocation of a time space within the academic timetable, is experienced by the teachers as an enforced alternative that is unsuitable for the existing problem, and thus the problem remains unsolved.

Another example described the school's response to a program that necessitated change in the teaching program and identification of an opportunity. This was experienced in the field more as a fear of refusing the opportunity, without the real need receiving any response. There are cases when schools cannot resist the integration of change, for example when a reform is imposed. As part of the implementation of the "New Horizons" reform for elementary schools, the structure of the teacher's employment altered and five hours were added to their post for "individual lessons", in which they were required to perform educational activities with groups of from one to five students. The reform was introduced in coordination with the representative Teachers' Association, but it was enforced on the school teachers from above, even on those who opposed it. The schools had to present their proposal for the integration of these hours and to determine their content. The way in which these decisions were implemented was reflected in the use of the Garbage Can model and this was represented in the two viewpoints of a teacher and deputy-principal below. First the description given by Einat, a Physical Education teacher (age 35, eight years' experience):

The superintendent told us that we had no alternative and that we had to perform the individual lessons. It's an extra job that was dropped on us, it's part of the agreement [with the union] ... they are hours that we get paid for.

Other evidence completes this picture and shows how these decisions are returned to be re-discussed since there are problems that repeatedly remain without a solution ("flight"). Mor, the deputy-principal (age 48, 20 years' experience) described her viewpoint:

We received the individual hours that we had to exploit. There are Physical Education and Civics teachers, who don't have any use for these individual lessons. We had to quickly determine what to do with the individual hours which came from the reform, so we decided that those teachers would teach private English lessons ... sometimes this assignment is suitable for the teacher's problem but sometimes the issue comes up again, even raised by the teachers themselves, who protest that they are not suited to this role, or by the subject teachers in the discipline that is studied. It's true that this has its price ...for example, this week the pedagogic coordinator showed me the program for a particular group and I thought to myself: how difficult is this for the students? Perhaps they need more hours and perhaps they need less? Does the teacher who provides a response to the student ask himself why he arrived at that solution? They just "pull out" the solution ... the solution might provide



resolution, but perhaps if we thought about it and went more deeply into the matter we would find a better response.

The school identified the opportunity to decide on content required for the individual lessons as a result of the change imposed on the school, yet they also recognized that in fact it was impossible to refuse to implement these lessons, even if they were not envisaged as part of the specific school's agenda. This led the management to make a hasty decision, determining unclear priorities. But the decision does not solve the problem that surfaced again and again, in angry protests by the teachers nor does it prevent the ruminations of the management concerning the optimal effectiveness of the initial decision. There is recognition that there was a lack of attention in the making of the original decision and a feeling of frustration heard in the deputy-principal's voice. It is possible that the use of the Garbage Can model at the time of the change stemmed from the preparedness of the staffs to cope with it.

Discussion

The present study drew on qualitative analysis of transcripts from interviews with teachers and identified three main situations in which school managements make decisions with the help of the Garbage Can model: (1) when pedagogic considerations arise (2) for considerations relating to resources (3) in coping with changes. Although these are situations which appear to be distinguished one from the other, each involves a dimension of vagueness and uncertainty ("organized anarchy"), pressure and inability to devote attention to the choice of alternatives and the creation of unsuitable solutions that await a future need that will arrive at some point.

The first situation where the school management used the Garbage Can model takes place when the school reaches an unsystematic pedagogic decision, without sufficient planning and thinking, as for example in the determination of a teaching curriculum based on investigative project learning. The school management chooses a new concept of teaching, even when it does

not know the exact meaning of this concept. The opportunity to adopt the pedagogy of project learning sounds attractive to the management even though the staff do not know how to use it effectively and the management is unable to properly guide them in its use. From the management's viewpoint, the hasty decision will create a momentum that may be worthwhile in the future, but it seems that it will also improve the school's reputation in the short run, as an innovative school (Saxonberg & Sirovátkaa, 2014).

Another pedagogic decision that was also made under pressure to attain quick results relates to pedagogic coping with a student with difficult behavior and the management's desire to immediately reduce the extent of the difficulty, without any deep examination of the problem. The chosen solution, to send the student to work in the school library, does not intend to treat the student's difficult behavior or its sources rather it is created as a result of clashing needs (the need to keep the student within the school framework versus his difficult behavior that prevent his inclusion in the class) and pressure to provide a swift solution. The absence of any desire to devote attention to the problem since the student will soon graduate from the school and the staff's unwillingness to invest in a long-term solution leads to the management deciding on a solution that may perhaps alleviate the situation in the class but does not solve the real problem, that can be expected to erupt again in the near future. Failure to cope with the behavioral difficulty over the years represents a situation of "flight" (Cohen, March & Olsen, 1972) and the management delays the treatment of the problem by adopting temporary solutions and in fact passes it on to the future, when the student goes on to another educational institution - junior high school.

The second situation identified as an occasion for the use of the Garbage Can model, relates to decisions concerning resources, and in fact this was the most prevalent type and appeared in many of the interviews. In the two examples described in the Findings section, but also in others, the situations described related to opportunities to



receive resources that the management did not want to miss but also were not prepared in order to exploit. The role of the management as agents of the policy-makers, who obliged them to cope with different demands, and simultaneously the management's lack of ability to understand the internal constrictions of the school and its capabilities are factors in the development of this type of decision-making (Seashore, Louis & Robinson, 2012; Shores & Loeb, 2016). While March and Olsen (2006) argue that instructions are meant to help the lower management as they reduce uncertainty, we see that the pressure felt by the school managements led them to act swiftly, but not necessarily efficiently.

A systematic decision-making process regarding the use of the extra budget would permit solutions to problems and perhaps improve learning achievements, for example through the reduction of the number of students in a class, or purchase of learning aids (Baker, 2012; Krueger, 2003). Contrastingly, in the cases described above it can be seen how being pressed for time, without any ability to devote the necessary attention, and involving occasional participants led to seemingly random decisions, that construct solutions to undiscerned vague problems, so that somehow the school can attain the additional budget. This article attempted to consider the question: "why some decisions tend to become garbage cans and others do not" (Zahariadis, 2007, p. 84). It seems that the urgent need of the management, at a pressed time, made them feel obliged to choose something in order not to lose the offered opportunity, but their priorities were not sufficiently clear (Cohen, March & Olsen, 1972). This led to their adoption of solutions whose contribution to the system was marginal, for example embellishing the school yard instead of creating a needed library.

The third situation arises in situations where the management is trying to cope with changes. So that reforms can succeed in the school, management must provide effective leadership (Bryk, Sebring, Allensworth, Luppescu & Easton, 2010). But while many recent reforms have expanded the management's authority, the R E A L

administrative role has also become more complicated (Fullan, 2014), necessitating the application of thinking and attention to different administrative aspects. In practice, in the examples described in the Findings section, the management adopted a national program (Heart Key) because they did not want to miss the opportunity offered by the Ministry of Education. But they did this without any reclarification of the school's priorities, without examining the program's suitability for the school and without any ability to implement it in a clear manner. Thus, an undesirable situation is created in the process of change, whereby teachers encounter something new that they do not understand how to apply (Hargreaves, 1998). This is a state of uncertainty, yet they need to alter their work practices (Kalenze, 2014). Deciding to adopt the program without any systematic thinking testifies to a lack of thoroughness in determining the school's priorities and also a lack of clarity regarding possible benefits of the decision (Levitt & Nass, 1989). Thus, a solution is created that has insufficient connection to the problem (an "oversight"). The teachers felt that the technology needed for the action is not clear (Cohen et al., 1972). Moreover, the change introduced by the "New Horizons" reform required the teachers' regular educational activity with the students, in small groups. The school's decision related only to the way in which the reform should be implemented and the content of the individual lessons (Schechter & Shaked, 2017) but did not conduct the necessary comprehensive clarification of the school's goals. In practice this process was performed carelessly, and the problems reemerged again and again ("flight").

In examining the themes that emerged regarding the use of the Garbage Can model, it is perversely surprising to see the matter of pedagogic considerations, because this is the foundation for the existence of a school, its fundamental routine existence, and the primary matter for which the management is accountable. Perhaps the reason for this is that among the many subjects involved in the school's demanding dynamics, there are also pedagogic subjects that



the school does not succeed in coping with each time, and when this involves a specific student it is easy to identify this, even though for the hundreds of other students learning in the school, substantive decisions may be reached in a different manner.

With regard to all the types of situations in which the Garbage Can model is used, a common insight is reached that when the management suffice solely with realization of an opportunity, when they find themselves making decisions under pressure, when they have other things to cope with, or when they do not pay sufficient attention, then school decisions are made in somewhat random process described as the Garbage Can Model. While this study aimed to uncover instances of Garbage Can decision making on an organizational level, to some extent the findings point at pressures that come from a higher level, dictated by the system (Gur-Ze'ev, 1997). For example, at the local level we can see lack of attention or problematic preferences to be a major source of such decisions, and they could be treated on a local level by revising organizational routines. However, some of the decisions were caused by pressures from above, for example additional resources that needed to be spent urgently and in very uncomfortable timing - which impedes the chances for optimal decision making. This notion arises interesting questions regarding the educational system as a whole – how many of the decisions on the system level are made in a Garbage Can process? In additional, using the critical theory lens (Gutek, 2013) we can question the true motivations of the higher level educational management when it puts the schools under such pressures: on one hand there are signs for more autonomy in the form of resources to be freely allocated or more freedom to school administrators to decide on specific issues. On the other hand, it leads to questions whether this practice of giving additional resources that come with specific time limits or usage demands is meant to limit the autonomy by not allowing full information processing and decision-making processes to happen. Hence, while these decisions appear to be autonomous, they often conform to existing practices, guided by

random and sometimes superficial thinking. In that way the dominant system inhibits deeper, fresher perspectives that might question the existing policies from evolving, by limiting chances for systematic decision-making, decrease the control of the educators. In attempt to obtain conviviality they challenge the available tools they have (Kellner, 2005), and thus increasing likelihood for Garbage Can decision making.

Often this process will produce a result that works, but in the main the problems are not solved and the solutions are inappropriate (Cohen, March & Olsen, 1972). Thus, when the situation involves matters that are important and substantive for the school, when making pedagogic decisions that are part of its fundamental work, in work reliant on resources for the public system that are not always abundant, and when there is a desire to implement change, it is necessary to increase awareness to the need for rational decision-making and highlight the importance of paying attention to the school's order of priorities, to (technological) work processes, to identifying problems before putting solutions in place. This awareness should allow most decisions to be made in systematic processes which have a higher probability of succeeding than irrational Garbage Can model decisions.

Since this was a qualitative study, the reader is invited to test to what extent the findings have relevance and value for their own context. Moreover, It would be informative if future studies could focus on decision-making in schools of different types and in different sectors and cultures, and in schools employing different managerial styles.

References

Arar, K., Haj, I., Abramovitz, R., & Oplatka, I. (2016). Ethical leadership in education and its relation to ethical decisionmaking: The case of Arab school leaders in Israel. *Journal of Educational Administration*, 54(6), 647-660.



- Arar, K., & Oplatka, I. (2011). Perceptions and applications of teachers' evaluation among elementary school principals in the Arab education system in Israel. *Studies in Educational Evaluation*, 37(2), 162-169.
- Baglibel, M., Samancioglu, M., Ozmantar, Z. K and Hall, G.E. (2014), "The relationship between school principal's perceived change facilitator styles and teachers' attitudes towards change", *International Studies in Educational Administration*, 42(3), 55-67.
- Baker, B. D (2012). Revisiting the old question: Does money matter in education? Albert Shanker Institute. ERIC Number: ED563793. Retrieved from: http://www.shankerinstitute.org/images/doesmoneymatter_final. pdf
- Ball, S. J., Maguire, M., & Braun, A. (2012), *How schools do policy: Policy* enactment in secondary schools. London: Routledge.
- Ben David-Hadar, I., & Ziderman, A. (2011). A new model for equitable and efficient resource allocation to schools: The Israeli case. *Education Economics*, 19(4), 341-362.
- Blass, N. & Tsur, S.&Zusman N. (2012) What did you learn in school today, dear little boy of mine? The use of teacher hours in primary school. Jerusalem: Research Department, Bank of Israel.
- Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010), Organizing schools for improvement: Lessons from Chicago, University of Chicago Press, Chicago, IL.
- Calabrese, R. L., & Zepeda, S. J. (1999). Decision-making assessment: improving principal performance. *International Journal of Educational Management*, 13(1), 6-13.
- Caldwell, B., & Spinks, J. M. (1992). *Leading the self-managing school*. London: Falmer.
- Christensen, S. (1976). Decision-making and socialization. In J. G. March and J. P. Olsen, (eds.), *Ambiguity and choice in organizations*. (pp. 351-385) Bergen: Universitetsforlaget.

- Cohen, M. D., March, J. G., & Olsen, J. P. (1972). A garbage can model of organizational choice. *Administrative Science Quarterly*, *17*(1), 1-25.
- Cohen, M. D., March, J. G., & Olsen, J. P. (2012). "A garbage can model" at forty: A solution that still attracts problems. In A. Lomi and J. R. Harrison (eds.) The garbage can model of organizational choice: Looking forward at forty. *Research in the Sociology of Organizations*, 36, 19-30.
- Cohen, S., & Karatzimas, S. (2016). Modernizing government accounting standards in Greece: a case of 'garbage can' decisionmaking. *Public Money & Management*, 36(3), 173-180.
- Creswell, J.W. (2014). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.), Harlow, Essex: Pearson,
- Elliott, J. (2005). Using narrative in social research. London: SAGE
- Fullan, M. (2014), *The principal: Three keys to maximizing impact*. San Francisco, CA: Jossey-Bass.
- Gawlik, M.A. (2015). Shared sense-making: how charter school leaders ascribe meaning to accountability. *Journal of Educational Administration*, 53(3), 393-415.
- Gur-Ze'ev, I. (1997). Critical Theory and Education. *Studies in Education* 2(2), 9-51 (In Hebrew).
- Gutek, G. L. (2013). *Philosophical, ideological, and theoretical perspectives on education*. Pearson Higher Education.
- Hargreaves, A. (1998). Pushing the boundaries of educational change. In A. Hargreaves et al. (eds.), *International handbook of educational change*. 1, 281-294. Dordrecht: Kluwer.
- Hoy, W. K & Tarter, C. J. (2008). *Administrators solving the problems of practice: Decision-making cases, concepts, and consequence.* 3rd ed. Boston, MA: Pearson.



- Inbar, D. (2009). Developing autonomy: The case of the Israeli school system. In A. Nir (Ed). *Centralization and school empowerment from rhetoric to practice*. (pp. 59-78). New York: Nova Science.
- Janis, I. L., & Mann, L. (1977). Decision making: A psychological analysis of conflict, choice, and commitment. New York: Free Press.
- Eisenhardt, K. M., & Zbaracki, M. J. (1992). Strategic decision making. *Strategic Management Journal*, 13(S2), 17-37.
- Kalenze, E. (2014). Education is upside-down: Reframing reform to focus on the right problems. London, UK: Rowman & Littlefield
- Kellner D (2005). Critical Theory and education: Historical and metatheoretical perspectives In Gur-Ze'Ev, I., (Ed.). Critical Theory and Critical Pedagogy Today. Toward a New Critical Language in Education. Haifa, University of Haifa Press.
- Klein, J. (2012). The open-door policy: Transparency minimizes conflicts between school principals and staff. *International Journal of Educational Management*, 26(6), 550-564.
- Kreiner, K. (1976). Ideology and management in a garbage can situation. In J. G. March and J. P. Olsen, (eds.). *Ambiguity and choice in organizations*. (pp. 156-173) Bergen: Universitetsforlaget.
- Krueger, A. B., & Whitmore, D. M. (2001). The effect of attending a small class in the early grades on college-test taking and middle school test results: Evidence from Project STAR. *The Economic Journal*, 111(468), 1-28.
- Levitt, B., & Nass, C. (1989). The lid on the garbage can: Institutional constraints on decision making in the technical core of collegetext publishers. *Administrative Science Quarterly*, 2, 190-207.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass, San Francisco, CA.
- Mertens, D.M. (2005). *Research methods in education and psychology: Integrating diversity with quantitative and qualitative approaches.* 2nd ed. Thousand Oaks: Sage.,

- Moos, L., Krejsler, J., Kasper Kofod, K., & Brandt Jensen, B. (2005). Successful school principalship in Danish schools. *Journal of Educational Administration*, 43(6), 563-572.
- Murphy, J., Vriesenga, M., & Storey, V. (2007). Educational Administration Quarterly, 1979-2003: An analysis of types of work, methods of investigation, and influences. *Educational Administration Quarterly*, 43(5), 612-628.
- Naveh, E. (2011). Configuration of knowledge, identity and politics through the current history curriculum in Israel. In Lyn Yates & Madeleine Grumet (eds.) *Curriculum in today's world: Configuring knowledge, identities, work and politics,* (pp. 210-222). London: Routlege.
- Nir, A.E (2000). Strategic plans and principals' need for control. *Journal of School Leadership*, 10, 332-343.
- Nir, A. E., Ben-David, A., Bogler, R., Inbar, D., Zohar, A. (2016). School autonomy and 21st century skills in the Israeli educational system: Discrepancies between the declarative and operational levels. *International Journal of Educational Management*, 30, 1231-1246.
- Noppe, R., Yager, S., Webb, C., & Sheng, B. (2013). Decision-making and problem-solving practices of superintendents confronted by district dilemmas. *International Journal of Educational Leadership Preparation*, 8(1), 103-120.
- Oplatka, I. (2007). The principal's role in marketing the school: Subjective interpretations and potential influences. *Planning & Changing*, *38*(3&4), 209-221.
- Oplatka, I. (2010). The legacy of educational administration: A historical analysis of an academic field. Frankfurt: Peter Lang.
- Padgett, J. F. (1980). Managing garbage can hierarchies. *Administrative Science Quarterly*, 25, 583–604.
- Patton, M.Q. (2002). *Qualitative research and evaluating methods*. Thousand Oaks, CA: Sage.

- Polka, W., Litchka, P., Mete, R., & Ayaga, A. (2016). Catholic school principals' decision-making and problem-solving practices during times of change and uncertainty: A North American analysis. *Journal of Catholic Education*, 20(1), 220-243.
- Pinfield, L. T. (1986). A field evaluation of perspectives on organizational decision making. *Administrative Science Quarterly*, 31, 365-388.
- Sager, F., & Rielle, Y. (2013). Sorting through the garbage can: Under what conditions do governments adopt policy programs? *Policy Sciences*, 46(1), 1–21.
- Saxonberg, S., & Sirovátka, T. (2014). From a garbage can to a compost model of decision-making? Social policy reform and the Czech government's reaction to the international financial crisis. Social Policy & Administration, 48(4), 450-467.
- Schechter, C. & Shaked, H. (2017). Leaving fingerprints: principals' considerations while implementing education reforms. *Journal of Educational Administration*, 55(3), 242-260.
- Seashore Louis, K., & Robinson, V.M. (2012). External mandates and instructional leadership: school leaders as mediating agents. *Journal of Educational Administration*, 50(5), 629-665.
- Shores, K., & Loeb, S. (2016). Distributive decisions in education: Goals, trade-offs, and feasibility constraints. *Theory and Research in Education*, 14(1), 107-124.
- Tamir, E., & Shaked, L. (2016). What to do with the bounty? Organizational patterns for the implementation of resources allocated by the Courage to Change (Oz Letmura) Reform. *Leadership and Policy in Schools*, *15*(4), 567-597.
- Taylor, S. J., Bogdan, R., & DeVault, M. (2016). *Introduction to qualitative research methods: A guidebook and resource*. John Wiley & Sons.

- Tracy, S.J. (2013), Qualitative research methods: Collecting evidence, crafting analysis, communicating impact. Chichester, UK: Wiley-Blackwell.
- Volansky, A. (2003) From experiment to educational policy: The transition to school-based management in Israeli schools. In A. Volansky and I. Friedman (eds) School-based Management: An International Perspective. Jerusalem: Ministry of Education, pp. 207– 220
- Wang, L. H., Gurr, D., & Drysdale, L. (2016). Successful school leadership: case studies of four Singapore primary schools. *Journal of Educational Administration*, 54(3), 270-287.
- Weiner, S. S. (1976). Participation, deadlines, and choice. In James G. March and Johan P. Olsen, (eds.), *Ambiguity and choice in organizations*. (pp. 225-250). Bergen: Universitetsforlaget.
- Zahariadis, N. (2007). The multiple streams framework: Structure, limitation, prospects. In P. A. Sabatier (Ed.), *Theories of the policy process*. 2nd ed. (pp. 65–92). Boulder: Westview.
- Zhu, Y. Q., & Kindarto, A. (2016). A garbage can model of government IT project failures in developing countries: The effects of leadership, decision structure and team competence. *Government Information Quarterly*, 33(4), 629-637.

About the authors.

Dr. Emanuel Tamir is the Head of the Educational Administration Program (M. Ed) at Ohalo College of Education in Katzrin, Israel. His research interests are decision making, teachers' unions and educational reforms. E-mail: emitamir@ohalo.ac.il

Mirit K. Grabarski is a doctoral student in Ivey Business school at Western University. Her research interests are career development and empowerment. Email: mgrabarski.phd@ivey.ca