

GOOD WORK

How to motivate the teachers of the Riha Community School.



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MANAGEMENT SUMMARY

This research is about what incentives (other than increase in salaries) can be used to motivate the teachers of the Riha Community School to improve work satisfaction and achievements. To find these incentives, the following (sub) research questions are discussed: 1. How does the Yuvalok staff score at the motivational (task and knowledge), social and contextual characteristics and the Volunteers Function Inventory (VFI) motives? 2. Which characteristic(s) has/ (have) potential for improvement? 3a. What are the possibilities to improve the motivation of the staff? 3b. Can Yuvalok afford these alternatives?

To find an answer on the first question, questionnaires based on the Work Design Questionnaire by Morgeson & Humpfrey (2006) are used, combined with the VFI of Clary (1998). The second question will be answered by using interviews with a sample of the teachers. Question three a. and b. are respectively answered by focus group discussions and interviews with the management.

It is not possible to give a detailed and accurate characterization of the job based on the questionnaires. In the content of the work a list of low and high scoring characteristics can be made, but the differences are too small to draw clear conclusions. Remarkable is the high presence of variety (both in the task and in the skills) and the autonomy to choose work methods. On the other side, there is little social interaction, both with contacts outside the organization and among the teachers about the relationship between each other's work (interdependence). Also the work context characteristics are considerably lower, which is not really surprising in a context of developing country.

The data from the questionnaires combined with results of the interviews, leads to the conclusion that interdependence needs the most attention, followed by interaction outside the organization and the variety of the equipment that is used. Also, there seems to be a potential improvement when it comes to communication between the staff and the management. However, this theme is missing in the used theory, so it is probably a so-called unknown characteristic.

Within the current constraints of the organization, the interdependence between the teachers' work and especially the communication about that interdependence can be stimulated by: organizing professional meetings with groups split by subject, senior teachers coupled to junior or new teachers by means of a buddy system and by writing carryover documents by the teachers.

The used equipment can be made more varied by making more use of the existing equipment available in the building. This can be tried by an 'equipment used list' recorded by teachers and through bringing in external knowledge. As soon as new funds come, specially appointed persons can take care of the library and the games, but for now it is important that it is clearly formulated who is responsible.

The interaction outside Yuvalok can be improved by using the existing network of the teachers and involve them in showing people around when it comes to the necessary fund raising contacts. To improve the contact that adds to the primary process parents meetings, more regular home visits or a community worker can be used to improve the contacts with parents. Communication with other schools about teaching can be created by envoys and joining interschool competitions in different fields.

Communication to the management can be improved by putting an item to discuss ideas for the management on the agenda during meetings, by reserving time during appraisal meetings and by creating a suggestion box.

SAMENVATTING (DUTCH)

Dit onderzoek gaat over welke prikkelingen (behalve salarisverhoging) gebruikt kunnen worden om de leraren van de Riha Community School (onderdeel van de Yuvalok Foundation) te motiveren en om werktevredenheid en prestaties te verhogen. Om deze prikkelingen te vinden, zijn de volgende (deel) onderzoeksvragen behandeld: 1. Hoe scoort het Yuvalok personeel op de motivatie (taak en kennis), sociale en contextuele eigenschappen en op de vrijwilligers functioneren inventarisatie (VFI) motieven? 2. Welke eigenschappen kunnen potentieel verbeterd worden? 3a. Wat zijn de mogelijkheden om de motivatie van het personeel te verbeteren? 3b. Kan Yuvalok zich deze alternatieven veroorloven?

Om een antwoord te vinden op de eerste vraag zijn vragenlijsten gebruikt. Deze zijn gebaseerd op de werk vormgevings vragenlijst van Morgeson & Humpfrey (2006), gecombineerd met de VFI van Clary (1998). De tweede vraag is beantwoord door middel van interviews met een aantal leraren. Vraag drie a. en b. zijn beantwoord respectievelijk door middel van focus groep discussies en interviews met het management.

Het is niet mogelijk een gedetailleerde en accurate beschrijving te geven van de eigenschappen van de baan, gebaseerd op de vragenlijsten. Over de inhoud van het werk kan een lijst worden gemaakt met hoog en laag scorende eigenschappen, maar de verschillen zijn te klein om heldere conclusies te trekken. Opmerkelijk is de hoge aanwezigheid van afwisseling (in de taak en in de benodigde vaardigheden) en autonomie om eigen werkmethodes te kiezen. Aan de andere kant, is er weinig sociale interactie, zowel met contacten buiten de organisatie als tussen de leraren over de relatie tussen elkaars werk (de afhankelijkheidsrelatie). Ook de eigenschappen van de context waarin het werk plaatsvindt scoren lager, wat niet heel verrassend is in een ontwikkelingsland.

De gegevens uit de vragenlijsten gecombineerd met de resultaten van de interviews, leiden tot de conclusie dat de genoemde afhankelijkheidsrelatie tussen leraren de meeste aandacht nodig heeft, gevolgd door interactie buiten de organisatie en de afwisseling in de middelen die gebruikt worden. Ook lijkt verbetering mogelijk in de communicatie tussen het personeel en het management. Aangezien dit thema niet in de gebruikte literatuur voorkomt is het waarschijnlijk een zogenoemde onbekende eigenschap.

Binnen de huidige beperkingen van de organisatie kan de afhankelijkheidsrelatie tussen het werk van de leraren en in het bijzonder de communicatie over die afhankelijkheidsrelatie gestimuleerd worden door: het organiseren van werkoverleg met groepen opgesplitst per vakgebied, ervaren leraren gekoppeld met onervaren of jonge leraren door middel van een buddy systeem en door het laten schrijven van overdrachtsdocumenten.

De afwisseling in de gebruikte middelen kan verbeterd worden door meer gebruik te maken van de beschikbare middelen in het gebouw. Dit kan geprobeerd worden door een 'gebruikte materialen lijst', bijgehouden door de leraren. Ook het inbrengen externe kennis van bijvoorbeeld leraren van andere scholen is een mogelijkheid. Op het moment dat nieuwe fondsen beschikbaar komen, kan er speciaal aangenomen personeel ingezet worden om te zorgen voor de bibliotheek en de gymlessen. Voor nu is het belangrijk dat het duidelijk geformuleerd is wie verantwoordelijk is voor wat.

De interactie buiten Yuvalok kan verbeterd worden door gebruik te maken van bestaande netwerken van leraren en door de leraren te betrekken in het rondleiden van gasten als het gaat over de noodzakelijke fondswervingsactiviteiten. Om de contacten te verbeteren die iets toevoegen aan het les geven zelf kunnen bijeenkomsten met ouders, regelmatigere huisbezoeken of een sociaal werker gebruikt worden om het contact met ouders te verbeteren. Communicatie met andere scholen over lesgeven kan gecreëerd worden door afgevaardigden van de school naar andere scholen te sturen en door het deelnemen aan competities tussen scholen op verschillende gebieden.

Communicatie naar het management kan verbeterd worden door: een onderwerp 'nieuwe ideeën' op de agenda te zetten tijdens vergaderingen, tijd te reserveren tijdens functioneringsgesprekken en een ideeënbus te maken.

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LIST OF ABBREVIATIONS

ANOVA: Analysis of Variance

BRIC Brazil, Russia, India, and China

HR: Human Resources

MDG: Millennium Development Goals

NGO Non-Governmental Organization

NIOS: National Institute of Open Schooling

SSA Sarva Shiksha Abhiyan

SSLC: Secondary School Leaving Certificate

VFI: Volunteers Function Inventory

WDQ: Work Design Questionnaire

PREFACE

This report is the result of a process of months in both the Netherlands and India. Beside the formal goal to finish my field study for the minor 'Sustainable Development' and my bachelor thesis for Business Administration, I reached several personal goals like experiencing a different culture and getting a decent introduction in the practice of development work. I hope that the recommendations will be useful for the managers of the Yuvalok Foundation, for the teachers, but in the end of course for the underprivileged children from the slums of Bangalore who go to the Riha Community School.

I want to thank everyone who helped me from idea until final report, especially my supervisors from the minor, the bachelor and Yuvalok for their professional feedback and guidance. Also friends, girl friend and family, both terrestrial and spiritual, were indispensable in their personal support in different ways.

1. INTRODUCTION

Short after the start of this millennium, the United Nations adopted the Millennium Development Goals (MDG). One of these goals is to “ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling”. (UN, 2010). In the official statistics, India scores somewhere around a ninety percent enrolment rate (depending on which definition is used for the specific indicator). This is quite a good score for a developing country, but bad in comparison with other BRIC-countries¹. It is doubtful how accurate these statistics are, because of the non-registered people in slums and the rural area. Besides that, the goal was set at a hundred percent, which is not accomplished. Also enrollment doesn’t say anything about quality of education. (Unicef, 2010) (Kingdon, 2007)

The Indian government tries to reach this education MDG with the policy program Sarva Shiksha Abhiyan (SSA). “SSA seeks to provide quality elementary education including life skills.” (Ministry-of-Human-Resource-Development, 2007). This happens in the present education structure, which differs between states. An impression of the system is given in figure 1. To guarantee quality and provide exams, there are a lot of educational boards who have their own focus. (Govinda & Bandyopadhyay, 2008).

The plans mentioned above, are on macro level. But like in the rest of the world, education in India happens at a micro level, with teachers who are responsible for executing the policy program SSA. They try to teach something relevant to the children in a classroom. One institute that is trying to reach the mentioned MDG at this micro level is the non-governmental organization (NGO) Yuvalok. Their mission statement clarifies their goal: “Investing in Lives of underprivileged children and young people with compassion through holistic care, education and developing vocational skills” (Yuvalok, 2009, p. 1). This research will focus on the Riha Community School, which is an important part of this NGO. They offer ten years of education, which qualifies children for vocational education or pre-university college (depending on which level of examination they pass, respectively the syllabi of the educational board: NIOS and SSLC²). The first responsible manager of the school is the principal who is responsible to the ‘leadership team’ that manages the whole Yuvalok Foundation. Besides the education in the Riha Community School, Yuvalok runs another school in the outskirts of Bangalore, aims at secondary education (mainly vocational training) and runs a food program for more than thousands children from the slums. (Yuvalok, 2009)

Outline

The report starts with a problem definition, ending in the main research question. After a theoretical framework, this question is split in several sub questions. The last part of the first chapter deals with the methods used to answer these questions. The second chapter gives a characterization of the job of a teacher in the Riha Community School. The third chapter describes potential improvements and the

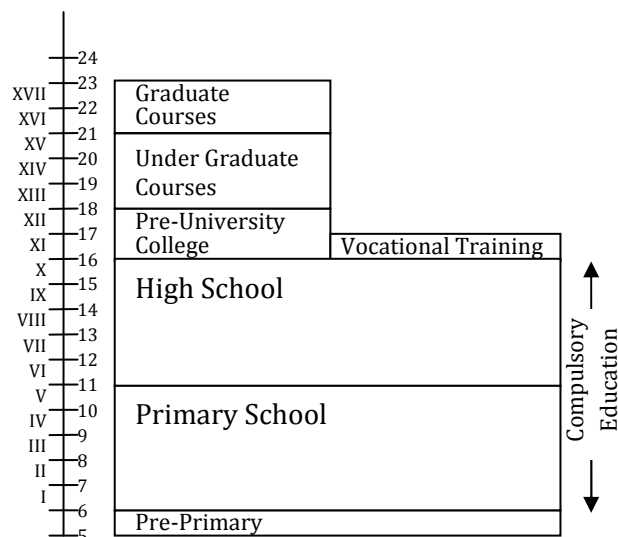


Figure 1: Impression Education System India (based on: NUEPA, 2007)

¹ A grouping acronym that refers to the related economies of Brazil, Russia, India, and China.

² NIOS: National Institute of Open Schooling, Board of Education for school level in India

SSLC: Secondary School Leaving Certificate or state syllabus.

fourth chapter is about the search for affordable alternatives. In the last chapters follows a conclusion and recommendations on how the management can possibly improve the motivation of the teachers.

PROBLEM DEFINITION

In this section a short exploration on the problem will be held, where also the limits of the topic will be defined. This will end in the main research question. The second part is a description of the theoretical context of motivation and the options in the theory for this research.

The Yuvalok Foundation is not able to pay market conform salaries to their staff members, or even to guarantee that the salaries will be paid on time. The main reason is the funding structure; the costs are not only paid by parents and the government, but mainly by foreign funders. Extra money, often used to increase motivation and attract high qualified staff, is not available in this organization. Therefore, in order to motivate the staff to come, stay and deliver good work other things are needed. The reason for this research is the wish of the management to gain insight in what motivates the staff and more important to receive suggestions how their HR-policy can be improved.

The staff of Yuvalok is approximately for three-quarter educational staff and for one-quarter supporting staff. The supporting staff is difficult to approach, mainly because of linguistic reasons. Also, replacement of the supporting staff is easier; therefore the decision is made to focus on the educational staff in this research. Yuvalok runs two schools and supports some more schools. The supported schools have their own management and HR-policy and one of the schools of Yuvalok is only in the set-up phase and has hardly any staff at the moment. So the focus of the research will be on the educational staff of the Riha Community School. From now on they will be referred to as 'teachers'.

The main question is: *What incentives (other than increase in salaries) can be used to motivate the teachers of the Riha Community School to improve work satisfaction and achievements?*

Introduction to motivation

In this part a theoretical introduction to motivation will be given, which is the starting point for more specified research questions. This starts with a definition of motivation. After that, appropriate theory will be presented. First of all, the theory has to deliver a concrete measure to find relevant factors that influence motivation in this context. Also, the theory has to be valid and the measurement valid and reliable. It is preferred to select a recent theory which uses the latest knowledge of science and reality. Science normally evolves positively over time, so recentness is a workable indicator. This can only be true when the more recent theory takes the previous theories into consideration and improve these by adding new knowledge. If not, recent theories do not have to be the most appropriate theories.

Definition

A central concept in this research is motivation. The definition given by Rollinson (2008, p. 196) will be used: "**A state** arising in processes that are internal and external to the individual, in which the person perceives that it is appropriate to pursue a certain **course of action(s)** directed at achieving a specified **outcome(s)** and in which the person chooses to pursue those outcomes with a degree of **vigour and persistence**." (Bolding is added). This is consistent with Vroom (1964) who sees the motivational force of a person as the result of the valence, the expectancy and the instrumentality he perceives to have to reach a desired goal. This determines the persistence of a person to a certain course of action.

Selecting a theory

Motivation is a widely used concept in both the psychology and the business administration research field. In general, psychology deals with the so-called process theories which "focus on mental processes which transform the motive force into particular patterns of behaviour". Influencing these processes directly is difficult and also not the aim of psychologists who mainly try to understand these processes. The business administration field deals with the so-called content theories which "focus on the needs of people". These theories "tell us something about work-related factors that

could trigger motivation" (Rollinson, 2008, pp. 194-247). These theories focus on how to influence motivation. For the scope of this research, the content theories are the most appropriate, because it is most useful to know how the content of the work can be changed to improve motivation. It is not necessary to fully understand the mental processes to influence motivation

Many authors already thought about work content that can influence motivation. The focus on content theories isn't enough to select the most appropriate theory, because many theories exist. Therefore the criteria validity, reliability and highest explanatory power will be used for selection. Recent publications with the newest insights are preferable, see the explanation above. Besides this, pragmatism will be relevant; does it offer a concrete measure to explore what the motivation is and, more important, how it can be improved.

It sounds logic to use education specific theory to measure motivation and to find potential methods to improve it, but in general it can be said that the available literature is not as reliable as available theory is in more general motivation literature. Moreover, the educational literature is more applied to concrete situations and focuses on solutions instead of measuring methods. One book which can be mentioned here is the work of Peter Bamford (1987). He considers the implications of the existing motivation theory for staff appraisal in schools. This is a noble purpose and some interesting suggestions are given, for example about rewarding, communication (of goals) and appointing motivated staff, but it does not offer a measurement method that is useful for this research. It could be possible to develop a measure, built on the mentioned literature. But that is, with the given constraints of time of the research, impossible.

Many factors could possibly trigger motivation of employees in all kind of different jobs. Many authors have tried to categorize the relevant factors that motivate people. An example is Maslow's (1954) 'needs pyramid' that distinguish hierarchical needs, that normally motivate people, from physiological needs to self actualization needs. This theory is about motivation in general and isn't applied to a work context. Another influential example, which is about motivation in a work context, is Herzberg's (1959)(1966) 'two-factor theory' that distinguishes 'hygiene factors' and 'motivators'. Hygiene factors are necessary at a certain level for motivation, but don't have any influence after that. Motivators aren't necessary for motivation, but if evident improve motivation. The distinction between 'motivators' and 'hygiene factors' can be useful in practice. However, in 1976 Hackman and Oldham (1976, p. 2) have ascertained that the "dichotomization of aspects of the work-place into 'motivators' and 'hygiene factors' may have been largely a function of methodological artifact, and the present conceptual status of the theory must be considered highly uncertain." Another problem of this theory for this (applied) research is that "the theory in its present form does not specify how the presence or absence of motivating factors can be measured for existing jobs. At the least, this increases the difficulty of testing the theory in on-going organizations. It also limits the degree to which the theory can be used to diagnose jobs prior to planned change, or to evaluate the effects of work redesign activities after changes have been carried out." (Hackman & Oldham, 1976, p. 3)

The already mentioned theories give some interesting knowledge about factors which trigger motivation, but are not useful to measure the motivation of the teachers and find out what has to be improved. It is possible to develop a measurement tool, but there is more available. Hackman & Oldham (1976), who criticized the 'two-factor theory', introduced their Job Characteristics Model. This model "specifies the conditions under which individuals will become internally motivated to perform effectively on their jobs. The model focuses on the interaction among three classes of variables: (a) the psychological states of employees that must be present for internally motivated work behavior to develop; (b) the characteristics of jobs that can create these psychological states; and (c) the attributes of individuals that determine how positively a person will respond to a (more) complex and challenging job." (Hackman & Oldham, 1976, p. 9) Motivation, in a work context, is one of the output factors of this model. Also, concrete input factors (core job dimensions) are given that can be applied to the job of a teacher. The Job Diagnostic Survey (JDS) is a concrete measure that can measure the independent variables (core job dimensions). This all seem to lead to the conclusion that this is a sufficient theory.

It is not surprising that after more than thirty years, this theory did receive some criticism and suggestions. This starts with their own discussion part in the article by stating that: "It should be noted that the job characteristics model deals only with aspects of jobs that can be altered to create positive motivational incentives for the job incumbent." (Hackman & Oldham, 1976, p. 27) The possible 'hygiene factors' are not taken into account. Also many other authors were critical, which is an indicator that the model is taken seriously, but also that improvement is possible. Morgeson and Humphrey (2006) summarize the criticism and say: "numerous ... work characteristics have been neglected (Parker, Wall, & Cordery, 2001). If scholars simply use the JDS without examining the larger work design literature, their research runs the risk of being deficient." And also: "numerous ... researchers have identified several problems with the factor structure of the JDS (Harvey, Billings, & Nilan, 1985; Idaszak & Drasgow, 1987; Kulik, Oldham, & Langer, 1988)" (Morgeson & Humphrey, 2006, p. 1321).

A measurement method will never be completely perfect. To reach the best results, one of the latest attempts to integrate all existing knowledge to compose a good research design to measure and improve work motivation and performances will be used. Morgeson and Humphrey (2006, p. 1321), the same authors that summarized the critic on the JDS, introduced a new model, published in an article named "The Work Design Questionnaire (WDQ)". "Although there are thousands of studies investigating work and job design, existing measures are incomplete. In an effort to address this gap, the authors reviewed the work design literature, identified and integrated previously described work characteristics, and developed a measure to tap those work characteristics." The measure is quite broad in the subjects it covers, besides the wide investigated motivational characteristics (dividable in task and knowledge) it pays attention to social and contextual characteristics. "If only a small number of motivational job characteristics are considered, the types of design decisions are likely to be highly restricted. In contrast, if a more comprehensive set of work characteristics is considered, more fine-grained changes to work can be made" (Morgeson & Campion, 2002 in: Morgeson & Humphrey, 2006, p.1322).

This set of characteristics influence work outcomes. Work outcomes can be behavioral, attitudinal, role perception and well-being outcomes. The model forecasts that a positive change in the work characteristics will lead to a positive change in the work outcomes.

The actual questionnaire consists of 76 items, following from the 21 work characteristics, classified in the four already mentioned groups of characteristics. The respondent has to react to the items by means of "a simple 5-point strongly disagree to strongly agree scale." (p. 1324). The output is a score per characteristic of how the respondent experiences that subject. A low score indicates a possibility for improvement at that work characteristic. It is expected that if a work redesign option improves the score on this characteristic that the outcome variables will improve too. The size of the effect is dependent on how important employees consider a change. It is possible that an improvement of a specific characteristic hardly improves the outcome variables if, in the specific context, the change is seen as unimportant.

This method meets the requirements of a 1. reliable, 2. valid and 3. recent method which offers a 4. concrete measurement method. In the next paragraphs each of these terms will be discussed.

Reliability

The authors mainly used two methods to ensure a reasonable reliability. First, they used several manners to select, revise and create the items. For example, avoiding negatively worded items and using a minimum of four items per characteristic. Second, they tested the questionnaire for "a wide range of different jobs". A factor analysis shows that simplification to four categories of characteristics isn't justified. The formulated "WDQ scales demonstrate excellent internal consistency reliability" (Morgeson & Humphrey, 2006, p.1326). The extensive check on reliability and the positive results give enough reason to accept the WDQ as a reliable measure.

Validity

To check whether we can expect this instrument to be valid in this context, three important issues will be discussed, namely the influence of the branch on the validity, the (Indian) culture and paid versus voluntary work. The test for validity of the instrument based on the results can be found in chapter 2.

First of all, the influence of the sector will be discussed. The validity is tested for “a wide range of different jobs”, included education, so the WDQ should be valid for educational staff. The authors consider that different outcomes are expected by different occupations, but this does not influence the validity of the WDQ in this context, only that possibly something could be said about expected outcome.

The second validity issue is that the WDQ has only been only tested in the Western Country USA. Hofstede (2001, p. 81, 102, 104, 114) tried to map cultural differences; he says that India has on average more power distance between hierarchical different people, which can (partly) be explained by religious differences. Hindu, with her caste system, is less egalitarian than Christianity and Islam are. A consequence of this is that participatory management leads to less satisfaction than in western countries. Although there is no strong empirical evidence to support this position, these explanations are possibly (partly) true, but “many other factors than national culture influence the indexes of Hofstede, for example the educational level, mean age and occupational level of the sample, and probably the organizational subculture” (Bosland, 1985, p. 16). Because of the strong validity found in the article and the doubtful influence of national culture, it seems superfluous to take the culture into account in choosing the factors that will be measured in the questionnaire. Likely, the factors in the WDQ influence motivation in different cultures. However, when looking at the expected outcome and the value of different output, culture is relevant. This will influence how the outcome of the questionnaires should be interpreted; more caution is needed in drawing conclusions from answers given by respondents that possible have another idea how you should fill in a questionnaire.

The last issue that will be mentioned now, is that Morgeson and Humphrey focus on paid work. This is the same for the other mentioned theories. The teachers deliver paid work, so formally they are employees, but because of the non-market salaries they could possibly have properties of volunteers. A low salary will probably attract other kind of staff that are motivated by other factors and react different to work redesign options. Koops (2010) says that the most important difference is that volunteers are (more) driven by free will and not by economical need. Next to the internal job characteristics, in case of volunteers, other motives might be present to explain why people put in work effort even given the low salary. The non-market salaries give reason to expect a mix between typical employees and volunteers. When dealt with volunteers, the Volunteer Functions Inventory (VFI) of Clary et al. (1998)(revised by Koops (2010)) is a more logic and valid choice (Okun, Barr, & Herzog, 1998). The original inventory of Clary investigates six possible motivators when doing voluntary work.

First of all, volunteers can have protective motives; volunteering can “reduce guilt over being more fortunate than others”. Because you are contributing to reduce the differences, you are not as guilty as others. Second, they can have value-based motives, such as the idea that all children should have equal opportunity to good schooling. This leads to voluntary behavior because, based on this value, people feel compelled to make their idea possible and are willing to voluntary contribute. Third, career motives can motivate people to volunteer. By being a volunteer, they are “preparing for a new career or of maintaining career-relevant skills”. Fourth, social motives can be a motivation, because “volunteering may offer opportunities to be with one's friends or to engage in an activity viewed favorably by important others”. Fifth, understanding (or learning) motives can be important because of “the opportunity for volunteerism to permit new learning experiences and the chance to exercise knowledge, skills, and abilities that might otherwise go unpracticed”. Sixth, enhancement of positive feeling can be reason to volunteer. “People use helping as a means of maintaining or enhancing positive affect.” (Clary et al., 2006, p.1518). These six motives have been tested using a

sample of nearly five hundred volunteers from five organizations in the USA and more than five hundred students. The results “offer evidence that each of the VFI scales measures a single, stable, nonoverlapping construct that coincides with a theoretically derived motivation for volunteering”. So all factors might give a useful insight in what motivates the teachers.

In a later study, Koops (2010) has revised the VFI by adding a seventh factor: ‘serious leisure’, because this theme wasn’t covered in the old inventory. The new instrument performs better on describing the whole spectrum of motives of volunteers.

The motives of the (revised) VFI look to internal human processes (it can be called a process theory), which are harder to influence¹. The items do not deliver concrete work design subjects. This in contrast to the WDQ that is based on concrete work design issues. When the VFI motives are found to be relevant, the translation to concrete work design issues still has to be done. This will be done during the interview and focus group phase. Possibly there is some overlap between the VFI motives and the work characteristics. Therefore it is important to realize that if a VFI motive needs improvement, this can be caused by a bad performance on a work characteristic defined in the WDQ, but it is also possible that unknown work design issues have influence.

In the VFI the words ‘Voluntary work’ are used. I will replace this by ‘work’ or ‘my job’ to avoid confusion. The teachers are not really working on a voluntary base, but probably are (partly) motivated like volunteers, because they still work in the school despite the low salaries. Also the term ‘Serious Leisure’ is used. This is confusing in a paid work context and will be replaced by ‘Nice time spending’. In appendix 2 the complete questionnaire can be found.

Recent

The recent date (2006) doesn’t need any explanation, especially when the relative long history of motivation studies is taken into account.

Concrete measure

The pragmatic value of this method is also convincing. It offers a concrete questionnaire which can be used directly or in a structured interview approach. In the methods chapter there will be more about asking the questions to Indian people. The measure is also elegant in its simplicity.

Morgeson and Humpfrey (2006, p.1324) say that “as research expanded the range of work design outcomes studied, it became clear that designing work ... involved several distinct trade-offs. In particular, although increasing motivational work design had the benefit of improved affective outcomes (i.e., job satisfaction), it also had the cost of increased training and compensation requirements”. These costs are problematic for Yuvalok, because they lack the financial means to cover these costs. Maybe in the long run the cost will be recovered because of higher output (staff attendance or quality of education, which might simplify funding activities), but in the short run it is problematic. The authors proved that both task and knowledge characteristics are positively related to satisfaction, but only knowledge characteristics are positively related to training and compensation requirements. If knowledge characteristics are improved, this will lead to higher training costs and to higher salaries paid. For task characteristics, other (cheaper or maybe free) alternatives are likely feasible. This justifies a focus on the task characteristics, especially when recommendations to improve the motivation are looked for.

“Virtually any of the motivational characteristics would serve to increase satisfaction.... Related to this, it may be that certain jobs are already high on one of the motivational characteristics and that additional increases are simply not feasible or will have negligible effects on satisfaction. The WDQ enables an assessment of these different work characteristics so a wide range of options can be considered” (p. 1324). This statement makes clear that all characteristics are relevant to study; on the other hand, caution is needed when trying to improve good scoring characteristics, because this could have negative effects. For example, when the task variety is already high, an enlargement of the task

¹ For a manager it is a lot easier to determine the content of a job than the internal human processes, such as the value an employee gives to the job. It is not possible to change directly anyone’s experience; this is only possible in an indirect way.

variety might not have a positive effect and may even have a negative effect because a satisfying part of the job is changed and maybe unsatisfying parts are leaved the same.

After these considerations, it is clear that the conclusion of the authors can be adopted: “the WDQ is the most comprehensive measure of work design currently available. As such, it represents an integration of more than 40 years of work design research into a single parsimonious measure.” (Morgeson & Humphrey, 2006). With addition of a category unknown characteristics and the VFI motives to the model presented by Morgeson and Humpfrey, a model suited for this context is created. The work characteristics are expected to influence (desired) work outcomes. Also the VFI motives are expected to influence the work outcomes. The work outcomes are simplified to motivation and satisfaction, because a more specified insight in the work outcomes isn’t required for this research. The model can be found as figure 2.

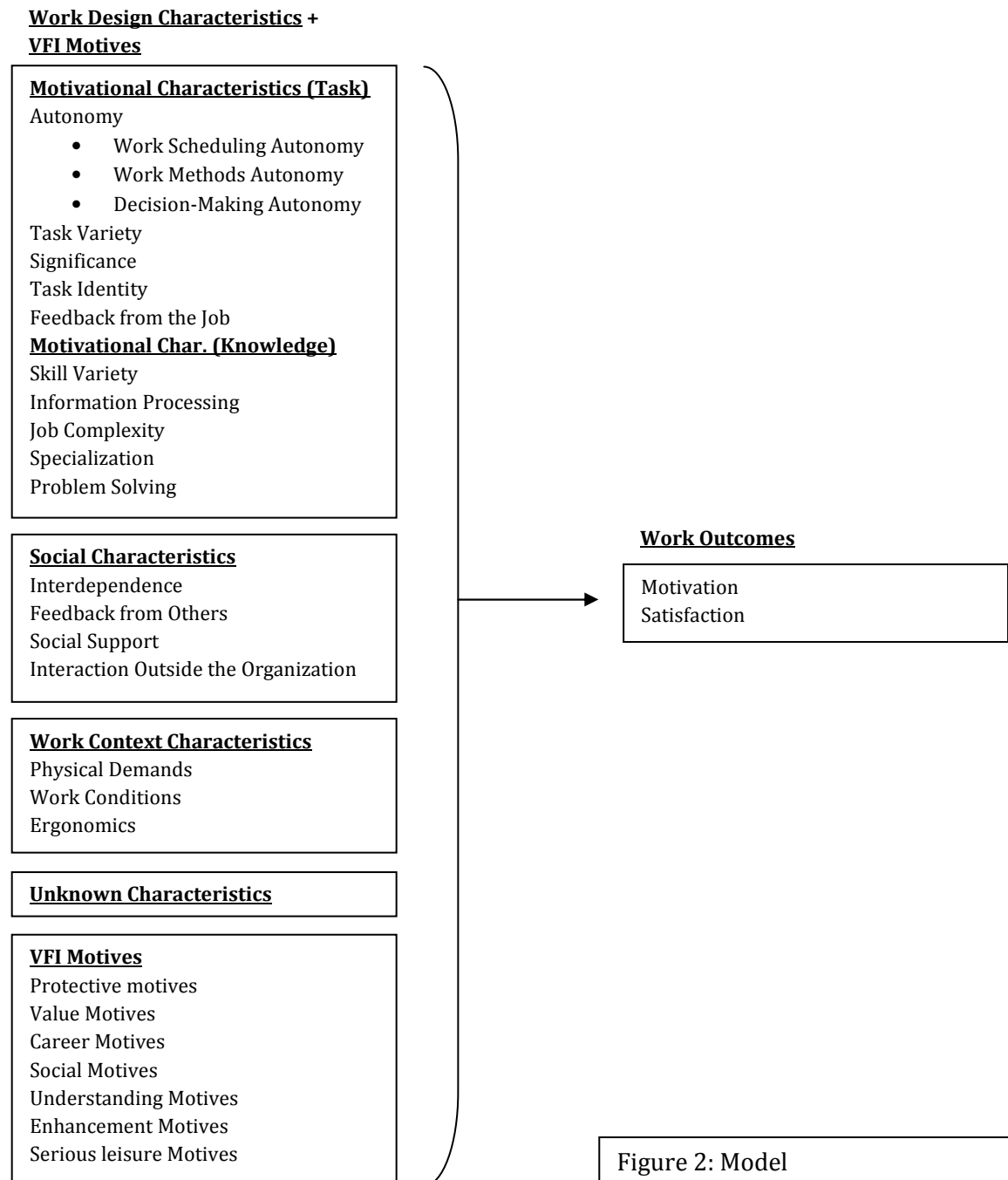


Figure 2: Model

Considerations from the theory

Before the research questions will be formulated, two statements of Morgeson & Humphrey (2006, p. 1324) will be stated. First, when redesigning existing jobs, it is important to remember that some changes are simply impossible to make. Second, results following from the WDQ will not automatically count for individual employees, but “typically all employees respond positively to motivating work, but some employees respond more positively than others (White, 1978)”. It is also possible that some characteristics in this specific context are completely irrelevant to the teachers. For example: ergonomics might be a non-issue in India, but this kind of conclusions can’t be drawn before the results are there.

MAIN RESEARCH QUESTION AND SUB-QUESTIONS:

The main research question has already been formulated: *What incentives (other than increase in salaries) can be used to motivate the teachers of the Riha Community School to improve work satisfaction and achievements?* To answer this question, the following (sub) research questions will be discussed.

1. How does the Yuvalok staff score at the motivational (task and knowledge), social and contextual characteristics and the VFI motives?
2. Which characteristic(s) has / (have) potential for improvement?
- 3a. What are the possibilities to improve the motivation of the staff?
- 3b. Can Yuvalok afford these alternatives?

METHODS

In this part the approach that is followed to answer the research questions will be explained. The approach consists of four phases and every phase will answer another research question: Questionnaires (1), interviews (2), focus group discussions (3a) and interviews [with the management] (3b). The following paragraphs consists of explanations about the samples, the data collection and the data analysis that led to answering the questions. Before the actual execution of this research took place, a period of (qualitative) observation and pre-testing of the questionnaires was done.

Qualitative observation + Pretest questionnaire

The first two weeks at Yuvalok were reserved for observation. This was done by teaching, participating in extracurricular activities and having informal conversations. The purpose was, first of all, to become more familiar with the situation and learn to understand some of the indigenous knowledge and symbols (for example body language, common expressions and sensitive subjects) (Sillitoe, Bicker, & Pottier, 2002). The second purpose was to create interest among the staff for the research and make them aware of my presence. It is important to emphasize the benefits of the research for the staff members (Mikkelsen, 2005).

Questionnaires

To measure how the Yuvalok staff scores at the 1. motivational (task and knowledge), 2. social, 3. contextual characteristics and 4. VFI motives, both the Work Design Questionnaire (WDQ), designed by Morgeson & Humphrey (2006) and the Volunteer Functions Inventory (VFI) of Clary (1998)(revised by Koops (2010)) are used. To measure the correlation between work characteristics and overall (experienced) job satisfaction and motivation, the respondents are asked to rank their own satisfaction and motivation.

Normally “we can start measuring only when we know what to measure: qualitative observation has to precede quantitative measurement” (Casimir, 1983). In this case, Morgeson & Humphrey offer a good measurement tool, (if combined with Clary’s (1998) VFI) which is valid and reliable in this case (see the introduction to motivation for a more extensive argumentation). The previous phase is formulated as ‘qualitative observation’. During this period a pre test of the questionnaire took place. It is known that the non-sampling error in development countries is usually

far greater than what is normally computed as a sampling error. Cultural reinterpretation of survey questions by respondents influence the outcomes (Stone & Campbell, 1984). Because of these cultural differences and the lingual interpretation, the interpretation of the questions is (pre-) tested by interviewing some persons after they filled in a questionnaire (Desai & Potter, 2006, p. 169). In the upcoming paragraphs, the two methods will be discussed.

The first method that was used, was asking some verbal questions to respondents who filled in the questionnaire. This took place in the staff room of the school. First, they were asked whether everything was clear. This resulted in a list of 12 items that were not clear for the respondents. After that some questions, which are in the questionnaire, were asked verbally. This did not lead to remarkable result, besides the fact that the answers were fairly positive, but that is consistent with the written answers.

The second method that is used, is the so called “vignettes” or “brief stories or scenarios that describe hypothetical characters or situations to which a respondent is asked to react” (Martin, 2006). The aim is to gain some insight in the interpretation of questions/positions. The vignettes that are used, the corresponding questions and the given answers are described in appendix 1. The questions are consistently answered by the three respondents. The interpretation of the vignettes is slightly more positive than expected.

To clarify the unclear items, a list with difficult words/phrases and their explanation or definition is added at the end of the questionnaire and referring stars in the text of the items. To deal with the seeming tendency to avoid ‘negative’ answers, instructions are added to be critical and honest. Also, it is mentioned in the introduction above the questionnaire that everything is anonymous. It is a basic moral issue to be confidential with (personal) information provided by respondents (Desai & Potter, 2006, p. 164). To underline these statements, a staff meeting took place. During the meeting, an introduction to the research and especially the questionnaire was given and the already mentioned instructions were explained.

After the implemented changes, the questionnaire was accepted as an appropriate quantitative measure and handed out to the majority of the teachers during the staff meeting. The absent teachers received the questionnaires the next day with personal instructions. The official response time was three days. A lot of teachers asked questions about specific question items. The most questions were caused by linguistic difficulties or inexperience with the concept of questionnaires and positions. Also some questions were asked about the anonymity. All the teachers were asked to fill in the questionnaire. This strengthens the reliability and this method is also feasibly at this scale.

More than three quarter of the questionnaires were handed in within the given time. Eventually 26 of the 28 full-time teachers, and also one of the two part-time teachers, submitted their questionnaire. This high response rate (more than ninety percent) can be explained by a successful observation/introduction period and a proper instruction meeting, where also the manager in charge stimulated the staff to fill in the questionnaire. Also the Dutch coasters, which were distributed to respondents to stimulate the response rate, were probably debit to the high response rate. The submitted questionnaires were considerably complete. Only 118 questions of the total 3159 were left blank or invalid (96.3% valid answers). The high response rate improves the statistical power of results, compared to a low response rate.

To get from filled-in questionnaires on paper to useful results, some processing and analyzing has to be done. Now follows a description on how the data is sorted and cleaned, how the variables are computed, the reliability and validity is checked and which analyzing methods led to the results.

After the questionnaires had been put in the database, the shuffled items were sorted so the original order by characteristics returned. Also, the reversed scored items were reversed, so high scores will represent an expected high motivation. In case of two adjoining answers, the method chosen was to pick in turn the higher or the lower score.

To gain information about the motivating factors and the characteristics of the work, the items that are supposed to measure a concept must be summarized in a scale. There is discussion

among methodologist whether it is right to treat Likert scale items as interval measurement level or only ordinal measurement level is justified. Knapp (1990) advise is that 'the researcher should decide what level of measurement is in use (to paraphrase, if it is an interval level, for a score of 3, one should be able to answer the question "3 what?"); non-parametric tests should be employed if the data is clearly ordinal, and if the researcher is confident that the data can justifiably be classed as interval, attention should nevertheless be paid to the sample size and to whether the distribution is normal.' (Jamieson, 2004).

In this research, the choice for the interval measurement level is a justified one. In the presentation of the questions, the suggestion of same distances between different values is obvious. The five boxes that could be chosen by a respondent are of the same size and without distance between them. Also, during the instruction of the respondents the suggestion of same distances between the categories was made. To justify the interval level, it is also important to mention that a score (for example 3.2) can be seen as the experienced presence of the concept. The value in itself makes no sense, but it is a useful number in relation to the other scores.

Because the data is considered as being at an interval measurement level, the scale can be composed by computing an average score per concept (a concept consist of mostly four or five items). Whereby the different answer categories are converted into the numbers 1 to 5 according to their level of agreeing with the statement, so a numerical mean can be computed. If a respondent has a missing value, the mean is not computed, except if at least eighty percent of the items within a category contain a valid value. This process led to thirty-one potential concept variables.

The data about in which standard the teachers are involved, is classified into three categories: high school, primary and nursery+1st standard. This is similar to the physical division of the class- and staffrooms at Yuvalok.

Three checks on reliability are done. First of all, the internal consistency of the concept variables is checked. Second, the means and standard deviation are considered and third, a check on the normal distribution is done to see whether the assumption necessary for using an ANOVA (analysis of variance) tests is fulfilled. To say something about the (construct) validity a correlation matrix will be presented.

To check the internal consistency, a random selecting of 25 percent of the concept variables (that needs no special attention) is checked for whether the cronbach's alpha is high enough or can be raised significant by deleting an item. Normally a cronbach's alpha of 0.7 is seen as sufficient, so in the test the majority has to be above this score. Normally an improvement of 0.05 is considered as high enough to delete an item, but because the scales are already validated and the amount of items is limited, a conservative attitude is chosen towards the deletion of items. Only an improvement of 0.10 will be considered enough.

Special attention is justified for combined concepts (Autonomy, Feedback and Interdependence). The analysis of the cronbach's alpha will lead to a choice to use the general concepts or the individual parts. Only if all the individual concepts have a cronbach's alpha above 0.7 and improve the reliability, the general concept will be split up during the analysis.

By considering the means and the standard deviation, something can be said about whether the variability between the concepts is good and whether floor or ceiling effects did occur.

A correlation matrix is appropriate to indicate whether the expected relation between the work outcomes variables and the input variables really exist in this case. According to the model a significant relationship is expected between all work characteristics and VFI motives on the one side and work outcomes on the other side.

To analyze variances between groups (for example gender or age) an ANOVA test can be used. An assumption for using ANOVA is that the groups are normally distributed. To check on the normal distribution for relative small groups (smaller than 50), a Shapiro-Wilk test is suitable. If the P-value is below an alpha value of .05, normal distribution of the whole variable cannot be assumed. It is predictable that if the whole variable isn't normally distributed, the scores on the variable within

groups aren't normally distributed either. If no differences between groups can be computed, the mean and standard deviation of the whole group will be used.

After the data is cleaned and sorted, the variables are computed into useful scales and the reliability is checked, the results can be analyzed. The output consists of a mean or score per characteristic (between 1 and 5) and a standard deviation. A low score means that this particular characteristic is experienced as low or absent by the teachers. It does not have to mean that a low score is experienced as negative. To discover the value or priority for improvement of the characteristics, the next phase is needed. The levels of the means are only meaningful in comparison with other means, so the results are sorted and each quartile is colored with colors from light to dark. It is also important to consider the strength and the direction of the correlation of a construct with the work outcomes.

Interviews

To find out which characteristic has potential for improvement and which has preference for improvement, five teachers are interviewed about the results of the questionnaires. The selection of the teachers is done by stratified sampling. Analysis of variances between groups is not possible with the results of the questionnaire, caused by lacking answers on the indicating questions, but based on the observations and consultation with the manager responsible for HR it was possible to select teachers on the following factors: gender, age group, department (high school, primary or nursery/1st standard) and education level. Probably these factors influence teachers' answers. All of these factors are represented in approximately the right proportion in the sample. See appendix 3 for the exact sample.

Semi structured interviews are used, because this ensures that important subjects are covered, "but also provides the interviewees with opportunities to bring up their own ideas and thoughts". (Desai & Potter, 2006, p. 169-170). Rubin (1995, p. 43) says that the qualitative interviewing design is flexible and not locked in stone. This makes this approach suitable for adding qualitative information to the result of the questionnaire, namely the characteristics which could and should be improved.

To guarantee that the interviewees felt comfortable, all the interviews took place in the medical room at the basement floor. This relative small and isolated room offers a lot of privacy. The two chairs are arranged to create a comfortable setting for the interviewer and the participant. Also a desk for the external writer was there. See picture 1 for an impression of the setting.



Picture 1: setting of the interviews

To prepare the teachers, the results of the questionnaire were distributed in the staffrooms a week prior to the start of the interviews.

The interviews started with an introduction about the aim of the whole research and the interviews. After that the interviewees were asked to sum up which characteristics, they think, have potential for improvements or what other things need change; this was quite an open phase in the interview. The second part was introduced by a sort summary of the results of the questionnaires, followed by questions about striking results of the questionnaire; this part was more structured. See appendix 4 for the outline used during the interviews. The teachers were willing to contribute to the research by doing an interview, although it sometimes was difficult to find enough time between the normal teaching activities. During the interviews they seemed to be relaxed and open. One of them remarked that interviews are good because you can 'express your real feeling'. A lot of subjects came up during the open phase, but it was too difficult for most of the teachers to fully understand the results of the questionnaire and give a sensible reaction. Therefore the questionnaires are mostly treated in a structured way.

The analysis of the results is done by categorizing and summarizing the answers of the different teachers.

Focus group discussion

To explore what the possibilities for improving the motivation of the teachers are, the method 'focus group' is chosen. "Focus groups provide a good method for accessing group viewpoints and perceptions", but are not suitable to discover individual opinions. For getting an impression on how the staff reacts to some ideas and generating new ideas, this is not a problem. The group dynamics that stimulate discussion are worth the time. It is important to prevent group pressure and dominance of some individuals. It is the challenge for the moderator/discussion leader to gain everybody's input and to find the consensus. (Desai & Potter, 2006, p. 153-160; Marshall & Rossman, 1999; Babbie, 2007)

It is important to make everyone feel free to give his or her own opinion during the meetings. Therefore potential dominant groups are split from more 'shy' groups. The criteria to split up the group are: teaching department (high school vs. primary) and English skills (bad control of the language often causes shyness). Also, less spontaneous people were given a chance to have input, by giving out the discussion subjects a few days before the meetings. A familiar location, a classroom, was chosen to increase the comfort of teachers. See picture 2 for an impression of the setting.



Picture 2: setting of the meetings

A total of five focus group discussions with five or six teachers were organized. By organizing five groups, every teacher had the possibility to speak out. Besides the fact that this supports the feeling of involvement of the teachers, the management sees participating as a good learning experience for the teachers, since most of them hardly have any experience with (scientific) research.

The meetings started with a short presentation of the findings so far (a list of characteristics which could and should be improved), after that a brainstorm took place with the participants about possibilities to improve the specific characteristics. To stimulate the discussion about solutions, a sign with the word 'how' is used. Also the blackboard is used to clarify the questions with a couple of words and arrows. For example, to clarify interdependence the word teachers was written two times linked with a two sided arrow.

The analysis of the results is done by respectively merging, categorizing and summarizing the given suggestions during the different meetings.

Interviews (with the management)

The purpose of the last phase was to discover which alternatives (formulated during the previous phase) Yuvalok can afford. The focus was not only on money, but also on time, human capacity, knowledge and skills. This was done by interviews with the management. The direct manager of the school is the principle, but also the 'leadership team' that manages the whole foundation is meant when the word management is used. The interviews were held separately with every manager, to prevent influencing and to prevent planning difficulties.

As preparation for the interviews, the alternatives were presented to the management via a document sent by email. During the interviews the first part was reserved to find the constraints of the organization according to the manager's view. The second part was about the possible alternatives. First some open questions were asked to stimulate the interviewee to share thoughts about good and bad ideas, followed by specific question per characteristic to find affordable alternatives within the given constraints. In the last part, there was a discussion on how the ideas can be optimized to fit in the context of Yuvalok.

The results are processed into concrete recommendations to improve the staff motivation.

2. CHARACTERIZATION OF THE WORK AT YUVALOK

To find possibilities to improve the motivation of the teachers, it makes sense to focus on specific characteristics of the job and on factors that normally motivate volunteers, so the work can be characterized. The necessary data is gathered with questionnaires, see the previous chapter for explanation. This chapter is about the analysis of the questionnaires, starting with the tests on reliability, followed by the interpretation of the differences between the different characteristics.

TESTS ON RELIABILITY

To check the reliability, the test based on cronbach's alpha is performed. The results can be found in table 1. Except one, all the tested characteristics score higher than the critical value of 0.7, which indicates that the items measure the same concept. None of the possible improvements by deleting items reaches the critical value of 0.1, which indicates that the scale will not be improved considerably by removing items. Considering these results, proper reliability of the scales can be assumed for most of the characteristics.

Table 1: cronbach's alpha

Name variable	Present cronbach's alpha	Highest new cronbach's alpha if item deleted.	Improve-ment	Item number that causes best improvement
Values	0.781	0.779	-	3
Task identity	0.707	0.796	0.089	1
Job complexity	0.707	0.714	0.007	1
Problem solving	0.591	0.658	0.067	3
Interaction outside organization	0.783	0.805	0.022	2

Special attention is justified for the combined concepts (Autonomy, Feedback and Interdependency). Only the uncombined concepts of 'autonomy' all have a cronbach's alpha above 0.7, but because splitting won't be an improvement, the general concept will be maintained during the rest of the analysis. The others don't meet the criteria and won't be analyzed separately either. The results can be found in table 2.

Table 2: combined concepts

Name concept/variable	Cronbach's alpha
Work Scheduling Autonomy	0.760
Decision-Making Autonomy	0.732
Work Methods Autonomy	0.737
Total Autonomy	0.904
Initiated interdependence	0.511
Received interdependence	0.710
Total Interdependence	0.541
Feedback from job	0.604
Feedback from others	0.855
Total Feedback	0.857

In appendix 5 the descriptive statistics, the mean and the standard deviation of the constructs can be found. Overall, the scales demonstrate good variability. There is no evidence for floor effects and hardly for ceiling effects.

In table 3 the correlation matrix is presented of all work characteristics and VFI motives on the one side with the work outcomes on the other side. In appendix 6 the correlation matrix of all

constructs is presented. Positive correlations are expected by the model. Three work characteristics correlate positive on a significant level with motivation (Task significance, Task identity and Specialization) or almost (Autonomy). Also two VFI motives correlate significant with motivation (Enhancement and Serious Time Spending). Two work characteristics correlate positive at the 0.05 significance level with Satisfaction (Autonomy and Work Conditions), three almost (Task Identity, Ergonomics and Feedback) and none of the VFI motives. However positive relations were expected, two work characteristics correlate negative with motivation (Job complexity and Problem solving) and four constructs correlate negative with satisfaction (Social motives, Job complexity, Skill variety and Equipment use). These relations are negative correlated, but these relations are not significant. All the remaining constructs correlate positive, but not on a significant level.

Table 3: correlation matrix

	Motivation	Satisfaction
1. Protective	.30	.30
2. Values	.10	.11
3. Career	.25	.07
4. Social	.28	-.08
5. Understanding	.08	.17
6. Enhancement	.40*	.06
7. Serious time spending	.56**	.18
8. Autonomy	.38	.40*
9. Task variety	.06	.32
10. Task significance	.49*	.29
11. Task identity	.55**	.39
12. Job complexity	-.17	-.07
13. Information processing	.23	.26
14. Problem solving	-.04	-.09
15. Skill variety	.15	-.10
16. Specialization	.40*	.02
17. Social support	.21	.33
18. Interdependence	.18	.18
19. Interaction outside organization	.23	.07
20. Ergonomics	.08	.38
21. Physical demands	.11	.04
22. Work conditions	.16	.45*
23. Equipment use	.13	-.04
24. Feedback	.35	.38

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

The Shapiro-Wilk test, executed to test the necessary normality for an ANOVA Test, tells that seven of the twenty-six variables do not have a normal distribution. This, combined with the fact that quite some data to compose the groups is missing (many respondents did not fill in age, gender or standard they teach), leads to the conclusion that it is not justified to assume normal distribution within the groups. So an ANOVA test cannot be used. There are no meaningful groups recognizable in the data. In appendix 7 the results of the Shapiro-Wilk test are displayed.

ANALYZING RELATIONS AND DIFFERENCES

As stated before, the constructs are reasonable reliable, but the differences between the groups can hardly be analyzed. The work characteristics and the VFI motives correlate mostly positive with the work outcomes, although most relations are not significant and even some relations are negative. The levels of the means are only meaningful in comparison with other means. Even a comparison with data from other researches that used this measure is hard, because of the specific context of Yuvalok and the tendency of the respondents to give social desired answers. In table 4 the means are sorted

and each quarter is colored with colors from light to dark to highlight differences. This is done separately for the work outcomes, the VFI motives and the work content characteristics (based on the WDQ). The first number is the mean; the second number is the standard deviation (sd) which says something about the dispersion from the mean of the given answers.

The scores on both the satisfaction and the motivation variable are high and almost equal. This is probably partly caused by the tendency to give high scores, but also points to high experienced satisfaction and motivation.

The motivating factors point out that the teachers experience teaching at Yuvalok as a nice and good way of spending their time, both correlate positive with the work outcomes and even one relation is significant. Relationships with others and career options are less present. Although this correlates less with the work outcomes (i.e. Social motives and Satisfaction correlate negatively) and it has to be said that speaking openly about career related topics as promotion, salary or resigning is, in general, not done among the teachers.

In the content of the work, a list of low and high scoring characteristics can be made, but the differences and the correlations with the work outcomes are in general too small to draw clear conclusion. Remarkable is the high presence of variety (both in the task and in the skills) and the autonomy to choose work methods, which, with exception of Skill variety with satisfaction, has quite high correlations. On the other side, there is less social interaction, for example with contacts outside the organization. The degree to which the job is related to the work of other teachers for completing the work (interdependence) scores low too, both correlate positive with the work outcomes although the relation is not significant. Also the work context characteristics¹ are considerable lower, indeed not really surprising in a context of development work. In western countries, attention for things like ergonomics is normal, but many Indian people do not even know the word. The correlation of these characteristics with the work outcomes is divers. One correlation is significant positive, but also one correlation is negative.

According to the model, a causal relationship between the current state of the work characteristics and the VFI motives can be expected with the work outcomes. To improve the outcome variables, an improvement of work characteristics, included possible unknown characteristics or the VFI motives is needed. The correlation matrix indicates the strength and the direction of the correlation of the characteristics with the work outcomes, but does not prove causal relationships between potential improvements in characteristics and improved motivation. The next phases have to find these causal relationships by asking how relevant the stated characteristics are for the teachers to cause effective improvements.

Table 4: results questionnaire

Work Outcomes	mean	sd
VFI motives	mean	sd
Satisfaction	4.31	.52
Serious time spending	4.30	.47
Values	4.17	.47
Understanding	4.04	.58
Enhancement	4.02	.54
Protective	3.48	.67
Career	3.39	.56
Social	3.36	.71

Work Characteristics	mean	sd
Task variety	3.96	.56
Skill variety	3.95	.55
Information processing	3.86	.57
Social support	3.83	.43
Task identity	3.82	.60
Task significance	3.82	.59
Work conditions	3.78	.55
Feedback	3.75	.64
Autonomy	3.73	.63
Problem solving	3.63	.62
Specialization	3.61	.44
Ergonomics	3.49	.56
Physical demands	3.31	.79
Interdependence	3.21	.57
Interaction outside organization	3.14	.71
Equipment use	3.05	.88
Job complexity	2.96	.68

¹ A category of work characteristics consisting of: work conditions, ergonomics, physical demands and equipment use

3. QUANTITATIVE DATA AND EXPERT OPINIONS ON CHARACTERISTICS

Information about the characteristics of a job is useless, unless it is combined with knowledge about the appreciation of the state of the different characteristics. It should influence the effect variable motivation and satisfaction, which is the aim of the research. This knowledge is gathered through interviews with a sample of the teachers; see the methods part for more explanation. In this chapter an overview of the results from the interviews will be given. After that, an analysis, based on the results of the interviews and the questionnaire, will be given, which will lead to a shortlist of characteristics that have potential for improvement.

RESULTS

Work outcomes

When the teachers are asked whether the motivation and the satisfaction is really high or that the high scores are caused by social pressure, they all say about themselves that they are really motivated to teach the children, even when the conditions (for example salary or work context) are not ideal. 'Full satisfaction with the job is impossible, but if you look to the background of the kids in the school, you should not complain.'

VFI motives

The interviewees don't think that it is a problem that the personal career isn't pushed by working in the school. 'People who work here, don't do that because they want a better job, or because they want more money, they work here (mostly) for the children. No one is expecting something better.' Also, getting social contacts as a motivational factor is not important. 'Making friends is not an aim of working for Yuvalok. Some friendships started here, but this doesn't need stimulation.'

Interdependence

The teachers realize that their work is interdependent. Teachers in higher classes for example observe problems with the knowledge level gained by the students in earlier years. There sometimes is communication between parallel classes (for example IVa and IVb), but the communication between teachers of different standards (for example a V and VI standard teacher) doesn't go further than blaming each other's shortages, instead of constructive conversations. Especially between the high school (from standard V onwards) and the primary section, there is hardly any useful communication about their interdependence and what can be done to improve the cooperation, for example covering some specific subjects better in lower classes, because they are needed in higher classes. The communication about this relation between each other's work is seen as an important lacking point.

Work context characteristics

The interviewees remark that teaching is a tough job, but that the new building, in use since approximately one year, is 'a blessing for the teachers' when it comes to work conditions.

When it comes to equipment the interviewees share the opinion that more variation in the teaching aids is useful and will improve the job. They notice that most facilities are there, but they are not being used (like the library or the science lab). They need organizing. On the other hand, bureaucracy and economic thrift sometimes de-motivate teachers to use available equipment.

Interaction outside the organization

Teachers think that interaction outside Yuvalok can be very interesting and add knowledge, but the focus has to stay inside to deal with the children. A lot of the interaction is linked to fundraising instead. It is quite personal now whether teachers use the opportunities to make contact with for example parents or teachers from other schools. The interviewees have the opinion that the contact with the parents is insufficient.

Unknown characteristics

Before the questionnaires were mentioned, the interviewees were asked about what can be improved in their job. The answers were diverse from 'more relevant training' and 'better structured and clearer communication from the management' to 'more contacts with parents so they can stimulate the students to study hard'. The mentioned subjects were mostly individual suggestions. The only returning subject was the communication with the management that is experienced as one-sided instruction without interaction.

ANALYSIS

Work outcomes

The high value of the work outcomes mentioned by the interviewees corresponds with the results from the questionnaire (motivation and satisfaction scores 4.30 and 4.31) and the first impression the teachers give on the work floor. But during the interviews, in informal conversation and by observing the attitude of the teachers, enough reasons are found for assuming suppressed feelings of discontent.

VFI motives

The questionnaires point out that career opportunities and social contacts are less present (scores of respectively 3.39 and 3.36) than the awareness of the relevance of the work (score of 4.17).

The social relationships seemed to be considered good, although sometimes respect and understanding for each other's background, language or work attitude/method is missing. Social understanding is important to improve, because more social understanding can facilitate better communication about the job. However, social understanding is not an aim in itself. Career seemed to be a non-issue and taboo.

Interdependence

The interdependence scored quite low (3.21) in the questionnaire, although it is obvious that the work of a teacher is strongly dependant on the teachers that teach the previous classes a student attends. The problem is that the communication about the interdependency is lacking. This can be explained partly by the lack of formal possibilities to communicate about this kind of subjects. There are no meetings planned about this.

Work context characteristics

Although the work context is rated relative low by the respondents (work conditions 3.78, ergonomics 3.49, physical demands 3.31 and equipment use 3.05), the teachers seem to accept this as inherent to teaching in a school for children from slums.

About the equipment use can be said that the teachers don't know how to get equipment or are afraid to be blamed for wasting equipment and thus don't use it at all. If the available equipment will be used more, the variety will increase. According to the theory, a raise of the motivation can be expected if there is a good fit between the variety and complexity of the equipment used and the needs, wants and abilities of the teachers.

Interaction outside the organization

Interaction outside Yuvalok scored low in the questionnaire (3.14). Some opportunities are there, but they don't aim to be interesting and instructive for the teachers. Some effort and (social) skills are needed to make (sensible) contacts. A lack of confidence (linked to language problems) holds many teachers back.

Unknown characteristics

Several authors wrote about the importance of participation of employees in the decisions of the management, both for the quality of the decisions and also the motivation of the employees; see for example Brownwell and McInnes (1986). One-sided communication from the management towards the teachers can be explained partly by the Indian culture, which is quite hierarchical oriented. The management has the tendency to approach the teachers more according to theory X (as described by McGregor (1960)) than according to theory Y that normally leads to more interaction.

LIST OF CHARACTERISTICS THAT HAVE POTENTIAL FOR IMPROVEMENT:

The results from the questionnaires and the interviews lead to the conclusion that the interdependence needs the most attention in the next part of the research, followed by the equipment and interaction outside the organization. Also, attention for the communication to the management seemed to be a potential improvement. This theme is missing in the original work characteristics, but because it is mentioned several times (unasked) by the teachers, there is reason to suppose that it is an 'unknown characteristic'. Therefore the list of potential improvements is as follows:

1. Interdependence
2. Equipment
3. Interaction outside Yuvalok
4. Communication to the management

4. AFFORDABLE ALTERNATIVES

A list with characteristics that have potential for improvement is not enough to answer the main research question about incentives that could be used to motivate the teachers. This chapter describes the search for affordable alternatives. This search started with focus group discussions with the teachers to make a list with possible alternatives. The second part consists of a couple of interviews with the management to get more insight into the constraints of the organization. With that information, the list of possible alternatives can be shortened to a list with 'affordable' alternatives in the context of the school.

POSSIBLE ALTERNATIVES

During the meetings, the four characteristics that have potential for improvement were discussed. Every part starts with a paragraph with the ideas mentioned during the focus group discussions. The remaining paragraphs consist of explanation and analysis of the alternatives.

Interdependence

The discussion question was: *How can the relation between each other's work be improved?*

The teachers recognise the need to improve the communication about their work among each other, especially with teachers they are most dependent on (junior with senior teachers, same subject, same/close by standard). In general, it is important to create an open environment, in which the teachers speak politely, listen carefully and, most of all, understand each other. To reach this, the following ideas were mentioned: meetings, buddies and carryover documents.

Communication usually works the best when people actually meet. To facilitate the communication about interdependence, the idea was raised to organize meetings (only) about practical/professional issues. Weekly prayer meetings already exist, but they aren't used for professional communication between the teachers. Davison (1997) considers 'social attributes', 'individual characteristics', 'meeting environment' and (supporting) 'technology' as important input factors for a successful meeting. In the context of Yuvalok, the social attribute, 'status influence' and the individual characteristic 'oral competence' seem to be the biggest challenges. During the focus discussion groups (which were held with groups from 5 to 7 persons), it appeared that the interaction between the teachers is way higher in small groups than it normally is when all the teachers meet in a big group together with a manager. During meetings with all the teachers, almost only the manager speaks. The absence of a person higher in hierarchy reduces the risk of status influence. Smaller group size is likely due to the higher level of interaction, because it reduces the risk that teachers with less oral competence will hold back. Therefore, to create relevant communication, the group should be split up. The teachers suggest that the best way to split up is according to the main subject a teacher is teaching. The alternative, to split up according to the standard taken, will, according to the teachers, enlarge the already existing gap between the different departments (high school and primary).

Senior teachers have a lot of knowledge and experience that make them capable of doing their job. If that knowledge would also be applied by junior teachers, their job would be easier. The idea is that a senior teacher is coupled as a 'buddy' to a junior teacher, to carry over knowledge about procedures, teaching methods or other work-related knowledge. Such a formal system is in line with the finding of Klug & Salzman (1991) who found empirical support for a formal induction program.

For a teacher it is important to know what has to be taught to the students. They follow the state syllabus, but this is not enough to know what the children already know, it only tells what the children should know. In practice, the irregular intake and attendance of students disturbs this. The proposed solution is a carryover document, written by the class or subject teacher for the next teacher. In this document has to be recorded what has been covered in the last year and the level of knowledge the students reached. The giving of the document can be combined with a verbal explanation.

Equipment

The discussion question was: *How can the equipment be made more useful?*

In general there is a lack of enough (qualified) staff to use the equipment optimal. This is mostly visible in the library and for games classes. There is vagueness about who has the responsibility over the distribution of the equipment. Mentioned solutions are: extra staff, training and 'equipment used list'.

There are more than thousand books in the library that are hardly used. Children hardly know how to use books without damaging them or they can't even read properly. Teachers should teach this by taking them to the library on a regular base. This can be accomplished if someone is made responsible for keeping the library open and well-maintained.

The equipment for outside games is not (or only partly) used because of lack of knowledge and time to organize good games. One responsible person to organize the games can solve this.

There is equipment available to organize non-academic classes (for example games, music/singing or devotion classes). These kind of classes can improve children's achievement in regular classes and stimulate other talents. Again a lack of time and organization is the problem, which could be solved by extra (trained) staff.

To improve the knowledge of the existing teachers about how to use the equipment, teachers from outside could be brought in to show how a particular resource can be used effectively. This improves the knowledge about how to use equipment, but also the attention for that equipment can make teachers aware of the existence of specific equipment and inspire them to use it.

To stimulate teachers to use a variety of equipment, a list can be made by every individual teacher about the equipment he or she uses. During the evaluation, the list can lead to a conversation about whether the approach of the teacher or the system should change to make the equipment useable. A serious danger is that teachers think that using equipment is negative. The communication before and during the evaluation has to make clear that there should be a balance between stimulating to use equipment and being economic with the resources. The balance at the moment is towards being economic.

Interaction outside the organization

The discussion question was: *How can the interaction outside Yuvalok be improved?*

The discussions focused around two themes: improving the quality of the necessary contacts related to funding and making contacts which can add knowledge or experience to the primary process (teaching). For the first theme, using the personal network of teachers and allowing them to help with showing visitors around is mentioned. For the second theme, contact with parents via parent meetings or a community worker is mentioned. For contact with teachers of other schools, envoys and interschool competitions are mentioned.

In general it is important for a charitable organization to have a lot of publicity. The teachers can use their personal networks (other schools, local businesses or churches) to raise awareness of the work Yuvalok is doing and promote the possibility of sponsorship. Because the networks and the knowledge about the work is already there, this doesn't have to be a big burden.

Sometimes people come to visit the school. The teachers can help with showing visitors around, if time is given to them and they are prepared. For teachers this is an opportunity to speak to different people and it might create trust in the organization for the visitors.

The contact with the parents is insufficient. Contact with parents can help the teachers to understand behaviour of children or stimulate the parents to motivate the children to study. This can be improved by parent meetings, more regular home visits or a community worker, who is specialised in contact with parents with underprivileged backgrounds.

To create useful exchange with other schools, envoys could be sent to other schools (neighbouring schools or similar NGO's) to share methods. For teachers with less social skills or linguistic problems, informal contacts can be stimulated by joining interschool competitions (sport or

academics). A prerequisite constraint is that when children are taken out, they must be well disciplined and teachers must be able to control them.

Communication to the management

The discussion question was: *How can the teachers be enabled to come up with good ideas to the management?*

It is important that the potential of good ideas the teachers have gained during their work reaches the management. Therefore, they have to feel free to speak about ideas for improvement and receive feedback on their input. To reach this goal, three ideas are raised: meetings, personal contacts and a suggestion box.

During meetings like those stated under interdependence, ideas that should reach the management can be listed on the agenda. These meetings should be in small groups and without the managers, see the reason under interdependence for more explanation. The management can discuss with the leaders of the group to hear the ideas.

Another idea is to reserve time to talk about good ideas during personal meetings with a manager, for example the annual appraisal meetings. For some teachers the one-to-one situation might create the right atmosphere to share ideas, for others hierarchical higher persons might be too intimidating.

A last idea is to create a suggestion box or another facility, so written suggestions can be dropped anonymously. This can be a good opportunity for teachers who hold back at other options. It also physically shows that suggestions are welcome. On the other hand, the Indian teachers are not used to write about this kind of things. A huge part of the (professional) communication is done verbally. For the management it is important to take into account that users of a suggestion box 'want to be safe in the knowledge that both they - and their ideas - will be treated fairly' (Turrell, 2002, p. 2).

CONSTRAINTS

The constraints of the organizations mostly exist in the financial and the human resource field.

The manager responsible for the finances told that there is no money available to invest. The financial situation of the trust is affected strongly by the economical crisis and thus doesn't allow extra expenditures. Even when these ideas mean saving on the long term, there are no liquid means available to do these investments and therefore they have to wait.

Both the principal and the manager responsible for the human resources think that the present staff can invest some extra time in ideas, as long as it doesn't block the teaching. In practice this means that almost every teacher will have some periods (one period is forty minutes) off during the week and after school approximately half an hour is also available.

The average education level of the teachers is not appropriate to expect understanding of difficult systems.

To summarize, it can be said that ideas that don't cost money, are flexible in the timing and are not too difficult to understand can be implemented.

The ideas that involve hiring extra staff are not affordable, unless an existing teacher can do the extra activities in his or her spare time. A system with groups can work as long as the system is kept easy.

5. CONCLUSION, RECOMMENDATIONS AND DISCUSSION

This chapter will answer the main research question in the best possible way after the executed research. Following this, recommendations to the management of Yuvalok will be given. The report ends with a discussion part that evaluates the used model and discusses some issues relevant for future research. The main research question is: *What incentives (other than increase in salaries) can be used to motivate the teachers of the Riha Community School to improve work satisfaction and achievements?*

ANSWERING THE MAIN RESEARCH QUESTION

Despite it being impossible to give a detailed and accurate characterization of the job of a teacher in the school, it is clear that the (communication about) interdependence, interaction outside the organization and the equipment needs attention. Also attention for the communication to management is justified.

Within the current constraints of the organization, the communication about the relation between teachers about their work (interdependence) can be stimulated by: organizing professional meetings with groups split according to subject, senior teachers coupled to a junior or new teacher by a buddy system and by carryover documents.

The used equipment can be made more varied by making more use of the existing equipment available in the building. This can be tried by an 'equipment used list' recorded by teachers and by bringing in external knowledge. As soon as new funds are available, specially appointed persons can take care of the library and the games, but for now it is important that it is clearly formulated who is responsible.

The interaction outside Yuvalok can be improved by using the existing network of the teachers and involve them in showing people around when it comes to the necessary fund raising contacts. To improve the contact that adds to the primary process, parents meetings, more regular home visits or a community worker can be used to improve the contacts with parents. To stimulate communication with other schools about teaching, envoys and joining interschool competitions in different fields can be considered.

Communication to the management can be improved by taking a moment to discuss ideas for the management during meetings, by reserving time during appraisal meetings and by creating a suggestion box.

RECOMMENDATIONS

This conclusion leads to the following recommendations, more explanation about the mentioned alternatives can be found in chapter 4:

1. Organize professional meetings with all the teachers about the relation between each others work and about ideas to improve the school (that can be given to the management).
2. Couple new or junior teachers with a senior teacher as a buddy.
3. Make teachers write a carryover document for the next class teacher.
4. Let teachers record the equipment they use in a list and use this to stimulate them to use more (varied) equipment.
5. Bring teachers in contact with other teachers to share their methods about how to use equipment useful.
6. Make clear for everyone who is responsible for which equipment.
7. Make more use of existing network of teachers in fund raising activities.
8. Use the teachers when showing people around.
9. Organize parents meetings or arrange more regular home visits.
10. Join interschool competitions.
11. Ask for possible improvements during appraisal meetings.
12. Create a suggestion box.

DISCUSSION

In this part the model and the used methodology will be evaluated and some issues relevant for future research will be discussed.

The specific context of Yuvalok needs an adapted model. This model should take into account the characteristics of employees that work for less than market conform salaries in development work. The model in figure 2, chapter 1, attempts to do this.

Two weaknesses of this model are found during the research. First, the model measures many concepts that scores not distinctive enough to draw clear conclusions about this relative small population. The questionnaires that measured the concepts resulted in a long list of means that are mostly less than one standard deviation divided from each other. This is true for both the VFI motives and the work characteristics. Second, some characteristics are unknown. With other measurement methods one of those characteristic is found, communication to the management, but probably more unknown characteristics exist.

The questionnaire also had a weakness. The WDQ wasn't able to measure all relevant work characteristics. This was partly solved by including the VFI motives, but maybe some input variables are still missing. It was attempted to collect the missing information by observations and interviews, which worked satisfying. Enough information was gathered to formulate a satisfying answer on the main research question.

Subject of future research can be to discover the unknown work characteristics in the model and maybe to reduce the amount of characteristics in too a small set that are more distinctive. This can reduce the costs of similar research, because there will be less need for additional measurement methods (interviews and observation). As long as an optimized model isn't available, research about motivation in similar contexts will need extensive research methods, like the methods used in this research.

Although many seemingly comparable organizations to the Riha Community School exist, it is doubtful whether the results of this research can be generalized. Probably the work in many other NGO's in developing countries can be characterized in a similar way, but the specific solutions will likely be different in every situation.

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APPENDIX 1 – VIGNETTES

Vignette 1:

I work in the kitchen. I really like my job, the job itself is not very interesting, and it is at a low level. But it is important work; I like it to see people happy with food prepared by me.

Questions:

answers

Doing my job makes me feel needed.

strongly agree (2x), agree

The job itself is very significant and important in the broader scheme of things.

strongly agree (2x), agree

The job involves a great deal of task variety.

agree, neutral (2x)

The job requires a depth of knowledge and expertise.

strongly agree, agree, neutral

Vignette 2:

I am doing now this job, but I do not really like it. It is a way to gain a management function. Now I am doing easy and repetitive work, but hopefully they will see my talent so I can reach a high position.

Questions:

answers

Doing my job can help me to get my foot in the door at a place where I would like to work.

strongly agree (2x), agree

I like my job.

agree (2x), neutral


The job involves a great deal of task variety.

agree, neutral (2x)

The job requires a depth of knowledge and expertise.

agree (2x), neutral

APPENDIX 2 – EMPTY QUESTIONNAIRE

		<p>fill in your name. For the research it is very important to be honest, also critical comments are important. There is no correct answer, just write down how you experience it. Mostly I ask you to react to positions. You can choose between strongly disagree, disagree, neutral, agree or strongly agree. At the end is space for comments. If you have question, you can always ask me. Some difficult words are marked with a star and explained at the end. Mark</p>				
Introducing questions						
Gender (circle the right answer)	male / female					
Age (circle the right answer):	0-30 / 30-40 / 40-50 / 50+					
Profession:	Standard:				
		strongly disagree	disagree	neutral	agree	strongly agree
Positions about different factors which can motivate you:						
1. Doing my job can help me to get my foot in the door at a place where I would like to work.						
2. My friends are doing the same job.						
3. I am concerned about those less fortunate* than myself.						
4. People I'm close to want me to work here.						
5. Doing my job makes me feel important.						
6. People I know share an interest in this kind of work.						
7. No matter how bad I've been feeling, my job helps me to forget about it.						
8. I am genuinely concerned about the particular group I am serving with my job.						
9. By doing my job I feel less lonely.						
10. I like my job.						
11. Doing my job relieves me of some of the guilt over being more fortunate than others.						
12. I can learn more about the cause for which I am working by my job.						
13. Doing my job increases my self-esteem*.						
14. Doing my job allows me to gain a new perspective on things.						
15. Doing my job allows me to explore different career options.						
16. I feel compassion* toward people in need.						
17. Others with whom I am close place a high value on this kind of work.						
18. Doing my job lets me learn things through direct, hands on experience*.						
19. I feel it is important to help others with my job.						
20. I have pleasure in doing my job.						
21. Doing my job will help me to succeed in my chosen profession.						
22. I can do something for a cause that is important to me.						
23. Doing my kind of job is an important activity to the people I know best.						
24. Doing my job is a good escape from my own troubles.						
25. I can learn how to deal with a variety of people/children.						
26. Doing my job makes me feel needed.						
27. Doing my job makes me feel better about myself.						
28. Doing my job experience will look good on my resume.						
29. Doing my job is a way to make new friends.						
30. This work gives relaxation in my daily life.						
31. I can make new contacts that might help my business or career.						
32. Doing my job helps me work through by own personal problems.						
33. I can explore my own strengths*.						
34. This job gives me a satisfied feeling						
35. I am really motivated to do my job the best I can.						

<i>Positions about your job:</i>							
Task characteristics							
1	The job itself provides me with information about my performance.						
2	The job allows me to plan how I do my work.						
3	The job itself is very significant and important in the broader scheme of things.						
4	The job has a large impact on people outside the organization.						
5	The job allows me to make my own decisions about how to schedule my work.						
6	The job gives me considerable opportunity for independence and freedom in how I do the work.						
7	The job is arranged so that I can do an entire piece of work from beginning to end.						
8	The job gives me a chance to use my personal initiative or judgment in carrying out the work.						
9	The job involves doing a number of different things.						
10	The job allows me to decide on the order in which things are done on the job.						
11	The job allows me to make a lot of decisions on my own.						
12	The job allows me to decide on my own how to go about doing my work.						
13	The job allows me to make decisions about what methods I use to complete my work.						
14	The job requires the performance of a wide range of tasks.						
15	The job involves completing a piece of work that has an obvious beginning and end.						
16	The job allows me to complete work I start.						
17	The job involves a great deal of task variety.						
18	The results of my work are likely to significantly affect the lives of other people.						
19	The job involves performing a variety of tasks.						
20	The job provides me with significant autonomy in making decisions.						
21	The work performed on the job has a significant impact on people outside the organization.						
22	The work activities themselves provide direct and clear information about						
	the effectiveness (e.g., quality and quantity) of my job performance.						
23	The job itself provides feedback on my performance.						
24	The job provides me the chance to completely finish the pieces of work I begin.						
Knowledge characteristics							
1	The tasks on the job are simple and uncomplicated.						
2	The job involves performing relatively simple tasks.						
3	The job requires me to keep track of more than one thing at a time.						
4	The job requires a depth of knowledge and expertise*.						
5	The tools, procedures, materials, and so forth used on this job are						
	highly specialized in terms of purpose.						
6	The job often involves dealing with problems that I have not met before.						
7	The job requires the use of a number of skills.						
8	The job requires that I only do one task or activity at a time.						
9	The job comprises relatively uncomplicated tasks.						
10	The job involves solving problems that have no obvious correct answer.						
11	The job requires that I engage in a large amount of thinking.						
12	The job requires me to use a number of complex or high-level skills.						
13	The job requires very specialized knowledge and skills.						
14	The job requires me to monitor a great deal of information.						
15	The job requires unique ideas or solutions to problems.						
16	The job requires me to analyze a lot of information.						
17	The job requires a variety of skills.						
18	The job requires me to be creative.						
19	The job requires me to utilize a variety of different skills in order to complete the work.						
20	The job is highly specialized in terms of purpose, tasks, or activities.						

Social characteristics									
1	Other jobs depend directly on my job.								
2	The job involves a great deal of interaction with people outside my organization.								
3	People I work with take a personal interest in me.								
4	On the job, I frequently communicate with people who do not work Yuvalok								
5	I receive feedback on my performance from other people in my organization (such as my manager or coworkers).								
6	Other people in the organization, such as managers and coworkers, provide information about the effectiveness (e.g., quality and quantity) of my job performance.								
7	Unless my job gets done, other jobs cannot be completed.								
8	I receive a great deal of information from my manager and coworkers about my job performance.								
9	I have the opportunity to develop close friendships in my job.								
10	The job involves interaction with people who are not members of my organization.								
11	I have the chance in my job to get to know other people.								
12	I have the opportunity to meet with others in my work.								
13	The job requires spending a great deal of time with people outside my organization.								
14	The job depends on the work of many different people for its completion.								
15	My job cannot be done unless others do their work.								
16	The job requires me to accomplish my job before others complete their job.								
17	My supervisor is concerned about the welfare of the people that work for him/her.								
18	People I work with are friendly.								
19	The job activities are greatly affected by the work of other people.								
Work context									
1	The job occurs in a clean environment.								
2	The work place allows for all size differences between people in terms of clearance, reach, eye height, leg room, etc.								
3	The job involves excessive* reaching.								
4	The job has a low risk of accident*.								
5	The job involves the use of complex equipment or technology.								
6	A lot of time was required to learn the equipment used on the job.								
7	The job requires a great deal of muscular endurance.								
8	The job takes place in an environment free from health hazards (e.g., chemicals, fumes, etc.).								
9	The seating arrangements on the job are adequate (e.g., ample opportunities to sit, comfortable chairs, good postural support).								
10	The job involves the use of a variety of different equipment.								
11	The climate at the work place is comfortable in terms of temperature and humidity.								
12	The job requires a great deal of muscular strength.								
13	The job requires a lot of physical effort.								
14	The work place is free from excessive noise.								
<u>final position:</u>									
Considering everything, I am satisfied with my job.									
<u>Space for comments:</u> (if you need more space for comments, you can use the other side)									
...									
...									
...									

[illegible]

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[illegible]

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some difficult words/phrases

less fortunate	poor people
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self-esteem	personal feelings or opinions of oneself
-------------	--

compassion	deep awareness of the suffering of another, coupled with the wish to relieve it
------------	---

hands on experience	learn relevant skill by doing things in practice
---------------------	--

own strenghts	personal skills and abilities
---------------	-------------------------------

expertise	great skill or knowledge in a particular field
-----------	--

excessive	more than good is for a person
-----------	--------------------------------

accident	event what injured you
----------	------------------------

APPENDIX 3 – SAMPLE INTERVIEWS

	G	A	T	E
Teacher 1	F	O	H	H
Teacher 2	M	M	H	H
Teacher 3	M	M	L	M
Teacher 4	F	O	P	L
Teacher 5	F	Y	P	N

G = Gender (Male, Female)

A = Age group (Old, Middle, Young)

T = Teaching department (High, Primary, Low/Nursery)

E = Education level (High, Medium, Low, None)

APPENDIX 4 – OUTLINE INTERVIEWS

Short introduction (5 min)

Aim research: *What incentives (other than increase in salaries) could be used to motivate the teachers of the Riha Community School to improve work satisfaction and achievements??* So, to advise management and serve teachers.

Aim interviews: *Which characteristic(s) has/ (have) potential for improvement? Which should be improved.*

Open phase (15 min)

What can be improved in your job? (subjects to mention in case of shyness: task, work context, social feedback, interaction/interdependence).

What do you think of the results of the questionnaire?

Structured phase (15 min)

Is the motivation and satisfaction really high or just social desired?

Is a further career unimportant?

How important is social contact/interaction/making friends? Is more desirable?

Are bad physical circumstances a problem? What do you think about equipment?

APPENDIX 5 – DESCRIPTIVE STATISTICS

	Mean	Std. Deviation
Motivation	4.30	.54
Satisfaction	4.31	.62
Protective	3.48	.67
Values	4.17	.47
Career	3.39	.56
Social	3.36	.71
Understanding	4.04	.58
Enhancement	4.02	.54
Serious time spending	4.30	.47
Autonomy	3.73	.63
Task variety	3.96	.56
Task significance	3.81	.59
Task identity	3.82	.60
Feedback	3.75	.64
Job complexity	2.96	.68
Information processing	3.86	.57
Problem solving	3.63	.62
Skill variety	3.95	.55
Specialization	3.61	.44
Social support	3.83	.43
Interdependence	3.21	.57
Interaction outside organization	3.14	.71
Feedback	3.75	.64
Ergonomics	3.49	.56
Physical demands	3.31	.79
Work conditions	3.78	.55
Equipment use	3.05	.88

APPENDIX 6 – CORRELATION MATRIX

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Motivation	-																								
2. Satisfaction	.30	-																							
3. Protective	.30	.30	-																						
4. Values	.10	.11	.48*	-																					
5. Career	.25	.07	.56**	.18	-																				
6. Social	.28	-.08	.68**	.36	.54**	-																			
7. Understanding	.08	.17	.45*	.58**	.28	.22	-																		
8. Enhancement	.40*	.06	.49*	.31	.64**	.38	.45*	-																	
9. Serious time spending	.56**	.18	.43*	.24	.35	.41*	.08	.31	-																
10. Autonomy	.38	.40*	.05	.06	.21	.01	.22	.44*	.32	.18	-														
11. Task variety	.06	.32	.31	.37	.50**	.13	.40*	.29	.35	.47*	.63**	-													
12. Task significance	.49*	.29	.37	.42	.32	.21	.65**	.46*	.51*	.69**	.23	.56**	-												
13. Task identity	.56**	.39	.16	.21	.24	.16	.17	.34	.64**	.59**	.63**	.23	.56**	-											
14. Job complexity	-.17	-.07	-.43*	-.12	-.28	-.61*	-.06	.00	-.13	-.20	.26	.13	-.21	-											
15. Information processing	.23	.28	.33	.16	.28	.06	.22	.46*	.25	.22	.36	.62**	.31	.33	-										
16. Problem solving	-.04	-.09	.15	.11	-.06	-.11	-.06	.00	.14	-.14	.34	.36	.00	-.43*	.42*	-									
17. Skill variety	.15	-.10	.38	.33	.05	.07	.23	.25	.21	.15	.35	.63**	.11	.13	.61**	.65**	-								
18. Specialization	.40*	.02	.52**	.48*	.44*	.55**	.23	.43*	.31	.17	.36	.42*	.28	-.18	.27	.14	.42*	-							
19. Social support	.21	.33	.60**	-.11	.33	.35	.08	.38	.28	.40*	.22	.20	.25	-.35	.25	.16	.29	.36	-						
20. Interdependence	.18	.18	.03	.10	.15	-.04	.02	.33	.17	.31	.21	.52**	.45*	-.42*	.78**	.29	.25	.19	.03	-					
21. Interaction outside org.	.23	.07	.17	-.12	.34	.31	-.13	.37	.01	.36	.04	.13	-.08	-.08	.11	-.13	-.07	.21	.35	.34	-				
22. Ergonomics	.08	.38	.30	.34	-.07	-.16	.14	-.17	.32	-.12	.27	.37	.56**	-.08	.33	.09	.21	.01	-.08	.26	-.45*	-			
23. Physical demands	.11	.04	.12	.15	.25	.01	.25	.61**	.33	.60**	.37	.42*	.33	.07	.53**	.23	.53**	.15	.31	.28	.10	.01	-		
24. Work conditions	.16	.46*	.52**	.12	.37	.27	.12	.09	.09	.10	.04	.11	.42*	-.49*	.08	-.20	-.11	.34	.36	.14	.16	.46*	-.10	-	
25. Equipment use	.13	-.04	-.03	-.37	.26	.32	-.35	.11	.05	.26	-.04	-.13	.13	-.39	-.03	-.31	-.14	.14	.45*	-.02	.53**	-.22	.31	-	
26. Feedback	.35	.38	.15	.12	.21	.18	.35	.24	.25	.54**	.41*	.55**	.50*	-.10	.23	.00	.22	.20	.14	.13	.12	.06	.57**	.23	-

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

APPENDIX 7 – SHAPIRO-WILK TEST

	Shapiro-Wilk		
	Statistic	df	P.
Satisfaction	.643	15	.000
Protective	.923	15	.216
Values	.955	15	.604
Career	.935	15	.322
Social	.979	15	.959
Understanding	.889	15	.064
Enhancement	.921	15	.201
Serious time spending	.931	15	.280
Autonomy	.819	15	.006
Task variety	.875	15	.040
Task significance	.950	15	.524
Task identity	.911	15	.141
Job complexity	.937	15	.349
Information processing	.955	15	.600
Problem solving	.895	15	.080
Skill variety	.817	15	.006
Specialization	.878	15	.044
Social support	.905	15	.115
Interdependence	.932	15	.289
Interaction outside organization	.942	15	.413
Ergonomics	.925	15	.231
Physical demands	.895	15	.080
Work conditions	.949	15	.513
Equipment use	.831	15	.009
Feedback	.935	15	.328
Motivation	.766	15	.001