

-RESEARCH ARTICLE-

ECONOMIC IMPACTS OF THE ROTATIONAL POLICY ON THE FOOD HANDLERS IN THE NATIONAL SCHOOL NUTRITION PROGRAMME IN GAUTENG PROVINCE

T. Berejena

Tshwane University of Technology
tendai.berejena@gmail.com
ORCID ID: 0000-0002-2334-2252

I. C. Kleynhans

Tshwane University of Technology
kleynhansic@tut.ac.za
ORCID ID: 0000-0001-6167-5608

S. P. Vibetti

Tshwane University of Technology
vibettisp@tut.ac.za
ORCID ID: 0000-0002-4116-3290

— Abstract —

The National School Nutrition Programme in South Africa was designed in response to the high prevalence of hunger and poverty among school children across the country. The programme was further designed to employ the local parents of learners in the marginalised communities. In response to this obligation, the Department of Basic Education employs the local parents as food handlers who prepare and serve meals in the programme. Literature shows that the contracts of the food handlers in the NSNP are confirmed to a 12 months' rotational policy. This study aimed to evaluate the economic impacts of the rotational policy on the food handlers employed in the NSNP in Gauteng Province. A quantitative research technique was adopted where random sampling was used to identify 290 food handlers in Gauteng secondary schools. A

Citation (APA): Berejena, T., Kleynhans, I. C. & Vibetti, S. P., (2020), Economic Impacts of the Rotational Policy on the Food Handlers in the National School Nutrition Programme in Gauteng Province, International Journal of Economics and Finance Studies, 12 (2): 520-533. Doi: 10.34109/ijefs.202012217

structured questionnaire assessed economic variables related to entrepreneurship abilities and employment prospects of the NSNP food handlers. The variables were rated on a Likert scale of 1 to 6. Descriptive statistics were used whilst Pearson Chi-Square for independence was administered to establish the relationship between the variables. A good internal consistency was reflected by the Cronbach alpha coefficient score of 0.9721. The evaluation found that the rotational contract policy impacts the economic potential of food handlers in the NSNP. The findings reflect that the NSNP food handlers find themselves back in the vicious economic circle after the expiry of their one-year rotational contract as they grapple to secure both employment and entrepreneurship opportunities.

A significant relationship between working experience and employment prospects was established. At the same time, the bearing effect of working experience on entrepreneurship abilities of the NSNP food handlers was also revealed.

Key Words: Economic impacts, Rotational Policy, Food handlers

JEL Classification: 138

1. INTRODUCTION

The National School Nutrition Programme (NSNP) in South Africa is significantly changing communities both socially and economically. In the past, school nutrition programmes were considered to be anti-hunger programmes for feeding hungry children at school (Devereux, Hochfeld, & Sanousi, 2018:72). Later in the years, the positive impacts of the NSNP were discovered to be far and wide. The primary impact of the NSNP is social development whilst the economic benefits are secondary (Devereux et al., 2018:36). The impacts are based on the theory of change which reflects that the NSNP has got a snowball effect on social and economic aspects in the communities. The programme is of great strategic importance operating at a large scale in all the nine provinces. It is a multi-stakeholder programme led by the Department of Basic Education (DBE) and supported by a range of partners which include government departments and non-governmental organisations. The Conditional Grant Framework (CGF) (2019:3), reveals that R7.7 billion is channelled towards serving the huge number of learners from the marginalised communities in the year 2020 to 2021. Thus, the NSNP is operating at a very large scale.

The necessity for the NSNP cannot be underestimated. There is sufficient evidence of malnutrition indicators among children of school-going age. A report by UNICEF (2019:89), shows that 4 % of children below the age of 5 years are severely stunted, while a significant number are severely underweight. Furthermore, 1 in every 6 of South African children is considered to be wasted (Global Hunger Index, 2018:2). Therefore, malnutrition in South Africa among young children is a public health challenge that requires a systematic approach to improve nutrition service and promote behaviour change. It is against this background that the government introduced the NSNP in 1994 to meet the nutritional needs of the undernourished school learners. Mawela and Van de Berge (2020:17), indicate that the NSNP is a key lever especially for children coming from poor households, since it addresses hunger and contributes to quality education as well as improving health among learners in South Africa. By design the programme targets learners in quintile 1 - 3 which are 60% of the poorest schools in South Africa (White & van Dyk, 2019:9). It is prominently tailor made to enhance learning capacity and improve access to education through the provision of nutritious meals to learners residing in low socio-economic communities (Sanousi, 2019:102). Economically, the NSNP stimulates activities through employment creation and entrepreneurship opportunities. The local community members are employed to work as food handlers who earn about R1000 per month which translates to R576 million per annum (DPME & DBE, 2016:18). Considering the high rate of unemployment in South Africa, the NSNP is economically alleviating the unemployment challenges. The Cabinet Resolution of 2002 mandated the NSNP to create job opportunities for the local people within its operations. To date 50 000 parents work as food handlers in the programme nationwide (DPME & DBE, 2016).

Food handlers in the NSNP have got a crucial role to create a link in the food chain from farm to fork. Specifically, they perform food preparation duties as part of a kitchen team. They are expected to perform routine duties such as peeling vegetables, cleaning and sanitising (Bialobrzaska, Randell, Hellmann & Winkler, 2017:10). However, it seems that the food handlers in the NSNP are overburdened with daily responsibilities. The NSNP operational guidelines gave a condition that each food handler should prepare and serve meals for 200 learners per day (CGF, 2019:4). This ratio for learners to food handler (1:200) seems to be posing a heavy load on their daily routine. Furthermore, the food handlers are expected to maintain a high level of health standards, kitchen hygiene and personal hygiene (Sibanyoni, 2017:55).

Regardless of such heavy responsibilities among the food handlers in the NSNP, it seems they have very limited economic benefits from the programme. Literature shows that the food handlers are subjected to a short term rotational contract of employment which is outlined in the NSNP operational guideline (DBE, 2015). The rotational contract policy implies that after every twelve months' food handler contracts are terminated without any provision for renewal. Consequently, a new group of poor food handlers is recruited under the same unsustainable condition. The plight of the NSNP food handlers goes far and wide as shown by Kwatubane and Makhaleni (2015:320), who indicates that income challenges become a reality at the end of contracts for the NSNP food handlers, leading to high emotions, bitterness and sadness. This unbearable scenario is exacerbated as the food handlers are made destitute at the end of the contracts because they are not employable anywhere due to lack of skills. It is believed that skills transform lives, drive the economy and what people know and what they can do has a major impact on their life chances (Brys, 2015:2). Precisely the twelve months' rotational policy seems to be failing to create a sustainable economic future for the food handlers.

2. METHODOLOGY

A quantitative approach was employed in the current study to enquire on the economic impacts of the rotational policy on the food handlers in the NSNP. The approach was based on the principles of the positivist paradigm which assume that there is only one objective reality, comprising objective facts (Du Plooy-Culliers, Davis & Bezuidenhout, 2014:25). In essence, the quantitative approach in this study dwelt much on statistical data collection and numerical measurements (Scott & Garner, 2013:9). Therefore, the study was empirical and deductive in nature.

In this study, the population of 305 secondary schools offering the NSNP in all the 15 educational districts of Gauteng constituted the target population. Probability sampling was used at each school to identify 1 food handler who became part of a sample of the 290 NSNP food handlers in the 15 districts. Typically, probability sampling was employed in the form of random sampling. Sharma (2017:749), opines that random sampling ensures that there is full representation of subjects at the same time serving as a check on conscious and unconscious bias on the part of the researcher. A structured questionnaire assessed economic variables related to entrepreneurship abilities and employment prospects of the NSNP food handlers. The questionnaire consisted of closed-

ended questions which were formulated in advance as referred to by Maree (2012:99) as “a *priori* categories”. Desai and Reimers (2018:80), believe that closed-ended questionnaires are efficient because they provide numerical data which is easy to analyse. The variables on the questionnaire were rated on a Likert scale of 1 to 6 on which 1 was ranked as strongly disagree, 2 as disagree, 3 as neither agree nor disagree, 4 as partially agree, 5 as agree and 6 as strongly agree. A Likert scale was ideal in this study to measure the economic impacts of the rotational policy on the NSNP food handlers as advised by Lee (2013:5), that using such a scale offers the respondents a wide range of responses in the case where there are possibilities of variations in opinion or attitude. A five-point Likert scale was avoided because the presence of a mid-point scale has got a tendency of misrepresenting the data gathered (Pimentel, 2019:183).

The Gauteng Provincial Department of Education Directorate granted the researcher a consent letter to conduct research in secondary schools. Permission to collect data was granted for the period of nine months during the first, second and third quarter of the schools’ calendar in Gauteng. Furthermore, the researcher sought permission from the 15 individual District Directors in Gauteng before commencing data collection in individual schools. To commence the data collection exercise, the researcher was granted an ethical clearance letter by the Faculty of Management Sciences at Tshwane University of Technology. The statistical data from the questionnaire was captured on an Excel spreadsheet and analysed using strata v15 statistical analysis software. De Vos et al (2013:252), advise that captured data should be compatible with statistical computer software. Furthermore, data analysis occurred through the use of a variety of figures such as the frequencies distribution, bar charts, pie charts and tables which summarized and described data to evaluate the impact of the rotational contract policy on the NSNP food handlers (Salkind, 2012:85). To determine and explain the relationships between variables, three statistical techniques were used in this study namely; descriptive statistics, Cronbach’s alpha coefficient and Pearson Chi-Square. The Cronbach alpha test performed showed a good internal consistency of the items in the questionnaire with a score of 0.9721.

3. RESULTS

The demographic information for the NSNP food handlers pertaining the age range, educational levels and gender parity were evaluated to determine their possibilities in participating in economic activities.

The highest frequencies (40.35%, n=117) was the age between 41- 50 years, while (31.72%, n=92) of the participants indicated that they were 31-40 years old and (22.07%, n=64) showed that they were below 30 years old. The minority 5.86%, n=17) indicated that they were between the age of 51 and 60 years whereas no participants were more than 60 years old. The study established that more than half of the NSNP food handlers were between the ages of 31 and 50 years. Regarding education levels, more than half (66.21%, n=192) of the food handlers had undergone formal education up to secondary level, while very few (33.79%, n=98) ended in primary education. All the NSNP food handlers in Gauteng did not have tertiary qualifications. Over three quarters (77.24%, n= 224) of the NSNP food handlers were females, as compared to less than a quarter (22.76%, n=66) who were males. In respect of career prospects, the majority of the NSNP food handlers doubted their possibilities of securing employment after the expiry of their contracts. It was found that the majority (83%, n=241) of the NSNP food handlers grapple with securing employment after the expiry of their contracts while only a few (17%, n=49) do not doubt. It was therefore determined that the future career prospects of the NSNP food handlers are very limited after the expiry of the one-year contract. A Chi-square test for independence revealed a significant relationship between employment opportunities and the working experience of the food handlers as indicated on Table 1 below.

Table 1: Relationship analysis between employment opportunity and working experience (N=290)

Cross tabulation				Chi-Square		
Consideration		Less than a year	1-3 Years	Df	Value	P-Value
Failure to get employment after the NSNP contract	Yes	72.29	86.44	1	5.0392	0.025
	No	27.71	13.56			

The Chi-square p-value was 0.025 therefore ($p\text{-value} < 0.05$). This result shows a positive relationship between future employment prospects and working experience. There is a statistical difference between the food handlers who fail to secure employment after the NSNP contract and those with longer working experience. Hence, the one-year non-renewable contract in the rotational policy does not provide enough experience required for future employment prospects for the NSNP food handlers. Furthermore, entrepreneurship possibilities of the food handlers after the NSNP contracts were also assessed. To determine the possibilities, four entrepreneurship competencies were measured. The results recorded low entrepreneurship competence levels in the food handlers.

Table 2: Entrepreneurship competencies

Description		Very poor	Poor	Neither poor nor good	Good	Very good	Excellent
Ability to identify business opportunities	N	88	96	31	33	19	23
	%	30.34	33.10	10.69	11.38	6.55	7.93
Ability to calculate risk in food service industry	N	79	109	38	24	19	21
	%	27.24	37.59	13.10	8.28	6.55	7.24
Knowledge on basic marketing principles	N	84	95	42	30	24	15
	%	28.97	32.76	14.48	10.34	8.28	5.17
Knowledge on basic costing and control	N	72	108	33	47	20	10
	%	24.83	37.24	11.38	16.21	6.90	3.45

In particular, the most frequent response (33.10%, n=96) depicts that food handlers possessed poor skills in identifying business opportunities and a substantial number (30.34%, n=88) felt that they had very poor skills. The least response (6.55%, n=19) of the participants considered themselves to be very good in identifying business opportunities in the food service industry while an insignificant number (11.38%, n=33) and (7.93%, n=23) of the participants had

very good and excellent skills respectively. The results in this variable depict that more than half (63.45%, n=184) of the NSNP food handlers can hardly identify business opportunities in food service.

In terms of risk taking in entrepreneurship, an insignificant number (14.83%, n=43) felt that they possess the skills in calculating risk to start a business in the food service industry, whereas (7.24%, n=21) of the respondents felt that they possess excellent skills. It is of concern that the majority (64.83%, n=188) of the respondents considered themselves to possess poor skills. The general view in this variable shows that the majority of the NSNP food handlers were lacking skills in risk taking thereby reducing their possibility of starting entrepreneurship activities.

Furthermore, the majority (61.73% n=179) of the participants felt that they had very little basic skills in marketing. Less than half (18.62%, n=54) considered their knowledge and understanding to be sound, whereas (14.48%, n=42) felt they possessed neither poor nor good marketing skills. Similar findings were recorded in the variable of costing and control abilities. It was disconcerting that of the 290 participants, the highest frequencies (37.24%, n=108) and (24.83%, n=72) felt that their knowledge and understanding of costing and control were poor and very poor respectively, while a small percentage (16.21%, n=47) and (6.90%, n=20) indicated that they had good and very good knowledge on costing. Very few (3.45%, n=10) considered their knowledge to be excellent. This finding shows a discrepancy in knowledge on costing and control among the NSNP food handlers. The general view was that the potential of the NSNP food handlers to embark on entrepreneurship was limited due to low skills.

The Chi-square test for independence revealed a significant relationship between entrepreneurship competencies and working experience.

Table 3: Relationship analysis between working experience and entrepreneurship abilities (N=290)

Cross Tabulation								Chi-Square		
Considerations	Year	Very Poor	Poor	Neither poor or good	Good	Very good	Excellent	Df	Value	P-Value
Ability to identify business opportunities	< year	30.74	33.77	7.36	12.12	7.36	8.66	5	14.4247	0.013
	1-3	28.81	30.51	23.73	8.47	3.39	5.08			
Calculate risk in food service	< year	26.41	38.10	10.39	9.52	7.79	7.79	5	12.0294	0.034
	1-3	30.51	35.59	23.73	3.39	1.69	5.08			
Knowledge on marketing	< year	29.00	33.77	11.69	10.82	8.66	6.06	5	8.6571	0.124
	1-3	28.81	28.81	25.42	8.47	6.78	1.69			
Knowledge on costing	< year	28.14	36.36	10.39	12.99	8.23	3.90	5	17.0552	0.004
	1-3	11.86	40.68	15.25	28.81	1.69	1.69			

Significant relationships were scored in three variables. The ability to identify business opportunities, the ability to calculate risk in the food service industry and knowledge on basic costing and control which individually scored Chi-square p-values 0.013, 0.034 and 0.004 respectively, therefore (p-values < 0.05). In particular, 28.14% of those with one year working experience felt that they had very poor knowledge on basic costing and control compared to 11.86% of those with 1 to 3 years. Only one variable shows an insignificant relationship with the working experience of the NSNP food handlers. The variable on basic marketing

principles scored Chi-Square p-value 0.124, therefore (p-value > 0.05). The level of competence in basic marketing principles for the food handlers with a working experience of less than a year does not differ significantly with those with working experience of 1 to 3 years.

4. DISCUSSION

The economic benefits of the NSNP are short lived to the local parents who work as food handlers in Gauteng province. The limited economic benefits are rooted in the rotational contract policy which prohibits renewal of contracts after 12 months. The results show a maximum working experience of one year, implying that no food handler in the NSNP can be employed beyond a period of 12 months. These findings agree with the DBE (2015:12) NSNP annual report which reveals that food handlers are impoverished parents who are employed in the NSNP on a rotational basis. This implies that at the beginning of every academic year, a new set of impoverished, inexperienced food handlers are employed under the same unbearable conditions. The economic plight of the NSNP food handlers is deep and painful as indicated by Kwatubane and Makhaleni (2015:320), who indicate that income challenges becomes a reality at the end of contracts for the NSNP food handlers, leading to high emotions, bitterness and sadness. Furthermore, the food handlers are unemployable anywhere due to lack of tertiary qualifications and advanced age. Legbara and Selepe (2017:75), also reported similar results which show that food handlers in the NSNP have low levels of education as the majority have only secondary education which can be the reason for low average income. Low educational levels tend to reduce the participation of individuals in the economy. The uncertainty in the economic prospects of the NSNP food handlers is further attributed to the little experience acquired in the short-term contract in the programme. The results in this study show that working experience has got a bearing effect on the entrepreneurship potential of the employee. A lengthy working experience provides skills and prepares people for future economic prospects. Brys (2015:2), concurs that what people know and what they can do has a major impact on their life chances. More experience in this regard may therefore be needed to expose the NSNP food handlers to entrepreneurship competencies. Thus, the one-year non-renewable rotational contract policy in the NSNP limits the working experience needed by the food handlers to engage in related economic activities.

5. CONCLUSION AND RECOMMENDATIONS

It is disconcerting that the rotational contract policy in the NSNP provides a short term economic solution for the food handlers as they go back in the vicious cycle of poverty after a period of one year. This challenge is worsened by other factors such as the lack of professional qualifications among the NSNP food handlers. To reduce the economic plight of food handlers, the rotational policy on the NSNP contracts should be relaxed and aligned to the Basic Conditions of Employment Act no. 75 of 1997. The contract period should be increased while creating a training ground for better career prospects. At the same time, the food handlers should be equipped with entrepreneurship skills through in-house training before exiting the NSNP. Literature has shown that entrepreneurship and life skills enable an individual to be self-sustainable. The current in-house training framework for the food handlers in the programme should be revised and updated to suit both the demands of the NSNP and the future needs of the food handlers. Formal certification should be awarded to the trained NSNP food handlers. Partnering with the hospitality industry and tertiary institutions should be implemented to incorporate industry related skills among the NSNP food handlers. This can prepare food handlers for economic prospects after the expiry of the rotational policy. Furthermore, the stipend offered to the food handlers should be in line with the EPWP social sector wage to support them in the harsh economic environment as they also spend more than eight hours at work.

REFERENCES

- Bialobrzaska, M., Randell, C., Hellmann, N. & Winkler, G. (2017). *Creating a caring school: A tool kit for School Management Team with accompanying guide*. Johannesburg: SAIDE
- Brys, B. (2015). *The OECD skills strategy. A strategy approach to skills policy*. Paris: OECD
- De Vos, A.S., Strydom, H., Fouche, C.B. & Delpont, C.S.L. (2013). *Research at grass roots. For the social sciences and human services professions*. 4th ed. 6th impression. Pretoria: Van Schaik.
- Department of Basic Education, South Africa. (2015). *National School Nutrition Programme annual report*. Pretoria: Government Printer.

Department of Basic Education.South Africa, (2018). *National School Nutrition Programme Guideline*. Pretoria: Government Printers

Department of Planning, Monitoring and Evaluation and Department of Basic Education. South Africa. (2016). *Report on the implementation evaluation of the National School Nutrition Programme*. Pretoria: Jet Education Services.

Desai, S. C. & Reimers, S. (2018). *Comparing the use of open and closed ended questions for web based measures of the continued-influence effect*: [Online]. Available from: <http://dx.doi.org/10.37581/s13428-0811066-2>. [Accessed: 20/07/2020].

Devereux, S., Hochfeld, T., Karriem, A., Mensah, C., Morahanye, M., Msimango, T., Mukubonda, A., Naicker, S., Nkomo, G., Sanders, D. & Sanousi, M. (2018). *School feeding in South Africa: What we know, what we don't know, what we need to know what we need to do. Food security SA working White paper*. South Africa: DST-NRF Centre of Excellence in food security.

Du Plooy-Culliers, F., Davis, C. & Bezuidenhout, R. (2014). *Research matters*. 1st ed. South Africa: Juta and Company Ltd.

Kristjansson, E. A., Gelli, A., Welch, V., Greenhalgh, T., Liberato, S., Francis, D. & Espejo, F. (2016). Costs, and cost-outcome of school feeding programmes and feeding programmes for young children. Evidence and recommendations. *International journal of education development*, 48(8):79-83.

Kwatubane, S. & Makhaleni, T. (2015). Parental involvement in the process of implementation of the National School Nutrition Programme in public schools. *International Journal of Education Science*, 9 (3): 315-323.

Lee, H.S. (2013). Major moderators influencing the relationships of service quality, customer satisfaction and customer loyalty. *Journal of Asian social sciences*, 9(2):1-11.

Legbara, K. & Selepe, M. (2017). Nutrition Knowledge of food handlers for the National School Nutrition Programme. *African journal of hospitality, tourism and Leisure*, 6 (4):45-75

Maree, K. (2012). *First steps in research*. Pretoria: Van Schaik.

Mawela, A. & Van de Berg, G. (2020). Management of school nutrition programme to improve environmental justice in schools. Pretoria: *Journal of clinical nutrition*, 33(2):9

Pimentel, J. (2019). Some biases in Likert scaling, usage and its corrections. Mindanao: *International journal of science*. 45(1) 183-191

Salkind, N.J. (2012). *100 Questions and answers about research methods*. London. Sage.

Sanousi, M. (2019). *The expected effects of NSNP*. Cape Town: University of Cape Town.

Scott, G. & Garner, R. (2013). *Doing qualitative research: Designs, methods and techniques*. 1sted. New Jersey: Pearson Education.

Sharma, G. (2017). Pros and cons of different sampling techniques. Phagwara. *International Journal of applied research techniques*, 3(7) 749-752

Sibanyoni, J.J. (2017). Food safety and quality assurance measures of the National School Nutrition Programme in Mpumalanga province, South Africa. D.Phil, Pretoria, University of South Africa

The Conditional Grant Framework. (2019). *National School Nutrition Programme allocation*. Pretoria: Government Printer.

UNICEF. (2019). *Overlapping stunting, wasting, and overweight*. New York. United Nations

White, C.J. & Van Dyke, H. (2019). Theory and Practice of the quintile ranking of schools in South Africa: A financial management perspective. Pretoria: *South African Journal of education*, 39(4):9