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Determinants of response of street food entrepreneurs in Ghana to business management training

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Abstract

Purpose – Considering the fact that business management training has the potential to improve performance of micro and small enterprises, it is surprising why participation rates in most freely offered management training courses remain low. The purpose of this paper is to explore factors that determine an invitee's decision to participate in a capacity building management training for street food entrepreneurs in Ghana.

Design/methodology/approach – Using data from a baseline survey, the study invited 314 street food entrepreneurs, selected through a stratified random technique from a list of 516 eligible food entrepreneurs. Training participants were invited to the programme through official invitation letters which were hand-delivered. Data on reasons for non-participation were collected either through phone interviews or on-site visit when a vendor could not be reached on phone. Descriptive statistics were used to summarise characteristics of vendors and businesses as well as reasons for non-participation while probit model was used to estimate determinants of participation.

Findings – The study found that whereas vendors with higher formal education better appreciate the benefits of education and training, their counterparts with fewer years of schooling do not. The latter's perceived knowledge deficiencies appear to explain the difference in participation rates. Also, total workforce does not necessarily increase the probability of participation, especially when there are no trusted workers in the business who will take over critical activities such as handling of finances in the absence of the owner. The study also found that distance between vending premises and training centres had significant negative effects on vendors' participation in the training programme.

Research limitations/implications – The external validity of the study findings and conclusions may not be limited to all informal sectors of the developing economies due to high degree of heterogeneity of the informal economy.

Originality/value – The study focusses on an informal sector in developing country dominated by women. The study focusses on understanding informal entrepreneurs' response to formal training.

Keywords Participation, Business management training, Micro and small enterprises, Street food entrepreneurs

Paper type Research paper

Introduction

Managerial capital is seen as very critical for the efficient utilisation of all resources of a business (Martinez *et al.*, 2013; Bruhn *et al.*, 2012). In view of this, the past few years have seen a surge in studies of developmental programmes that implement training programmes using randomized field experiments. In these experiments, random sub-sample of all firms or micro-entrepreneurs that fall within the project's focus is assigned to receive the proposed training whilst a similar comparison group does not. Some of these studies (Bruhn *et al.*, 2012; Drexler *et al.*, 2010; Berge *et al.*, 2011) have reported findings that conclude that business training actually promotes the growth and development of these micro, small and medium scale enterprises although available evidence in literature is inconclusive on the impact of training on business performance. For example, Drexler *et al.* (2010) pointed out that

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"the evidence so far has been mixed, with large heterogeneity in the estimated success of training programs". Similarly, a review of seven case studies in six different countries by Kapila and Mead (2002) found mixed results in terms of the impact of business service development training. Evidence from a randomized control trial in Sri Lanka by De Mel *et al.* (2012) also indicates that provision of training alone does not improve profits, sales or capital stock of operating female entrepreneurs. Similarly, Bruhn and Zia (2013) found that training did not lead to any significant difference between treatment and control businesses as far as performance of their businesses is concerned.

When training is seen to promote growth and development, it has occurred through a change and re-orientation of how certain activities are carried out within the firm. For instance, Bruhn *et al.* (2012), in their study to evaluate the impact of consulting services on small and medium enterprises in Mexico, found a very high effect on sales (80 per cent improvement), profit (120 per cent increase) and an increase in productivity of treated firms relative to those in the control group. Similar findings have been made by Drexler *et al.* (2010) who reported a significant effect on savings and how finances are managed by SMEs who were trained using simple rules of thumb. Mano *et al.* have also found a significant effect of managerial training on the probability of business survival for Ghanaian firms. A 20-30 per cent significant increase in profits of male entrepreneurs, and an improvement in the practices and knowledge of both males and females have been reported by Berge *et al.* (2011). These results are not limited to micro, small and medium size enterprises. Bloom *et al.* (2013) studied the effect of differences in management practices on the productivity of large scale textile firms in India and found a 17 per cent improvement in productivity for good practice firms.

If business management training can sometimes have this enormous potential to address most business-related constraints of small and medium scale enterprises, then why does the take up or participation rate continue to be low, especially when most of these training programmes are offered for free? McKenzie and Woodruff (2014) reviewed recent studies on business training and entrepreneurship and reported the average take up rate of such freely offered programmes to be 65 per cent. In fact, participation can be as low as 39 per cent (in a study by Bruhn and Zia (2013), among clients of microfinance institutions in urban Bosnia-Herzegovina), 49 per cent (Drexler *et al.*, 2012, also for existing clients of microfinance institutions in urban Dominican Republic), 50 per cent (Giné and Mansuri, 2011, among firm in rural Pakistan) and 51 per cent in the case of Valdivia (2012) in his study of training impact among mixed businesses in urban Peru). Training can still be low even for initially consented training invitees like in the case of Bruhn and Zia (2013). Giving account of the challenges they encountered, Bruhn and Zia wrote "the implementation of the business training programme was quite challenging. We faced considerable reluctance from our treatment group for attending the course, despite the fact that our entire sample consisted of individuals who had initially expressed interest in such a course".

This paper presents findings from a freely offered entrepreneurship and business management training conducted among a random sample of 314 street food enterprises in Kumasi and Tamale metropolises of Ghana.

If lack of business management skills is a constraint then a lot of questions beg answers. Why are take up or participation rates of these programmes low, even when they are mostly offered at no (direct) cost to the trainee and participation incentivised as in the case of the current study? What informs an invitee's decision to attend or not to? Are actual participants characteristically different from non-participants? What are the reasons behind such low take up rates?

The paper seeks to provide answers to these questions and makes appropriate recommendations of policy relevance. The study believes these answers and recommendations will go a long way to facilitate the design and implementation of future training programmes. This will, in turn, ensure that the expected numbers of targeted audience are reached and hopefully desired results achieved. A companion paper that investigates effects of management training found significant effects on vendors' practices, and profit margin.

Overview of street food vending in Ghana

Street foods, according to the Food and Agriculture Organization, represent any ready-to-eat foods or beverages prepared and/or sold by vendors and hawkers, especially in streets and other similar public places (Food and Agriculture Organization, 2009). The preparation and/or sale of these foods may be generally classified into three; those prepared in small scale factories at the local level and brought to the street for sale, those that are prepared by the vendor at home and brought to the street for sale, and foods that are prepared and sold at the vending site on the street.

Initial arguments by researchers and urban development planners classified the street food sector as being pre-modern, survivalist and ephemeral that would see extinction in the phase of urbanisation, industrialisation and development (Fields, 1975; De Soto, 1989; Marshall, 1987). However, current evidence in both developed and developing economies presents a picture contrary to this (Charmes, 2000). Street food vending has become part of the urban economy growing at an increasing rate in response to the growing population, especially in urban areas, who demand ready-to-eat foods away from home. This growth of the informal sector in general and the street food sub-sector in particular has principally been attributed to several factors and circumstances. Notable among these factors are structural adjustment programmes of 1980s and 1990s, that resulted in retrenchment of workers and dwindled public sector works (Becker, 2004), rural-urban migration, general decline in agricultural income (Ishengoma and Kappel, 2006), barriers to entry into the formal sector, and demand for low cost foods. Other important factors accounting for the persistence and growth of the street food sub-sector include high illiteracy rates and increasing involvement/participation of women. Moreover, starting a business as a street food vendor requires limited capital investment, non-specialized training and skills, and virtually no formal education. Street food vending in Ghana is currently ubiquitous and the trend is likely to continue as the aforementioned challenges still remain the same or even worse.

Theory of human capital (HC) investment

HC according to Sullivan and Sheffrin (2003) is the set of knowledge, competence and personality characteristics required to produce economic value through the execution or performance of labour. This implies that the process of value creation requires, in addition to tangible factors of production such as land and capital, the managerial or entrepreneurial capacity to effectively and efficiently combine these other factors of production.

Blundell *et al.* (1999) categorised HC into three; one's innate or acquired ability at the early stages of life, knowledge and qualifications that are acquired within the framework of formal education and third, skills, experiences and competences that are acquired through on-the-job trainings. Labour productivity therefore, is the combined and complementary product of these three knowledge sources. Individuals or organisations therefore invest in HC because there is a probability that their post-investment economic productivity will increase (Fatoki, 2011).

An entrepreneur's decision to invest in HC involves an initial cost. This cost will comprise the explicit tuition or training fees (if applicable), foregone or reduced earnings during the time of the training or schooling and the reduced productivity (Blundell *et al.*, 1999). However, it is the expectation of the individual entrepreneur or investor that the returns to the investment in HC, in the future, will be higher enough to compensate him/her. This return may be experienced through increased productivity, higher sales, increased profit, more efficient production, and business growth.

Thus, a rational and profit maximising investor or entrepreneur will only choose to invest in education or training (regardless of the form/type) if the expected return to the investment or benefit will exceed the cost or the opportunity cost of that investment. It must, however, be emphasised that the focus of standard economic models when it comes to investments in HC is on direct or quantifiable costs and benefits (Blundell *et al.*, 1999).

Thus, the study is premised on the assumption that a profit maximising street food entrepreneur will take up the opportunity to be trained in standard business management principles because they expect the future returns (effect on vendor practices and business performance) to be higher than foregone earnings and decline in productivity during the period of training (the opportunity cost). Because training was offered for free in this study, trained individuals do not incur any direct and explicit cost.

So, under the assumption of profit maximisation being the primary objective of street food vending enterprises, a vendor will participate in business management training when the expected net benefit (B_i) is greater than the opportunity cost of attending the training (C_i).

Thus, if the decision to participate is represented by Y_n, then:

$$Y_n = \begin{cases} 1, if\ B_i > C_i, \\ 0, if\ B_i < C_i \end{cases}$$

Although C_i can be justifiably represented by the practices and performance of the street food vendor prior to receiving invitation to participate in the training programme (and direct cost of training if providers had charged a fee), it should, however, be noted that B_i is not observed (and hence not quantifiable) at the time of decision making. Thus, vendors make their choice based on expected or perceived benefit of the training. This expectation (and by inference the choice) is also influenced by vector of enterprise characteristics (size, type of food sold, location, baseline performance) and vendor characteristics (education, experience, sex, previous training experience).

Study methodology

Sampling and randomisation procedure

Kumasi and Tamale were selected for this study due to their socio-cultural as well as economic differences. While Kumasi is the second largest city, relatively developed and an economically active city, Tamale remains relatively less developed with high incidence of poverty and perennial migration of some of its active labour force to the South of Ghana, especially during the lean farming season. A total of 516 stationary street food enterprises who had been in the sale of four dominant food types namely: fufu[1] and check-check[2] in Kumasi and tuo zaafi[3] and waakye[4] in Tamale[5] for at least three consecutive years and had total workforce of not less than three were selected from the study areas through a complete census. The choice of stationary/permanent enterprises was informed by the fact that the study was designed to collect panel data over a one year period. In view of this, tracing and following up on enterprises were going to be practically difficult if non-stationary enterprises had been included. Also, the rationale behind limiting the study to firms operating for at least three years is that the business interventions were planned to target committed vendors so as to achieve the ultimate impact of the project. Thus, duration of operation was used as a measure of commitment to the street food trade and the probability that street food vending is not a temporal shock management option for the vendor. Additionally, targeting firms with other employees aside the owner/manager was to allow the business an opportunity to operate even in the absence of the owner/manager.

Using data from a baseline survey conducted between May and June of 2013, 314 of the study sample were randomly assigned to receive business management training whilst the remaining 202 served as a control group. The treatment group consisted of 202 tuo zaafi and waakye vendors from Tamale with 112 vending fufu and check-check in Kumasi.

Design and delivery of training intervention

In collaboration with the National Board for Small-Scale Industries (NBSSI) and in consultation with selected lead vendors, training manual consisting of seven modules was developed. These modules are: street food vending as an entrepreneurial activity, business planning, record management, costing and pricing, marketing and customer relationship management and formation, management of food vendors' association and financial. Inputs were also received from the Directorate of Extension Services of the Ministry of Agriculture, Ghana. Delivery of training to the treatment group of vendors was done by local business advisory consultants (BACs) from NBSSI. In an attempt to ensure the growth of micro and small enterprises (MSEs), the NBSSI was established by the government of Ghana by Act 434 of 1981. The Board is mandated to promote the growth and development of MSEs (National Board for Small Scale Industry, 2014). Each of the BACs recruited for this study had minimum of five years' experience in training small and medium scale entrepreneurs and had been using a training manual very similar to that of this study for the same time period. The cost of delivering the training service was estimated to be GHC 288 (US$ 90.5)[6]. In a related paper that focusses on the effects of this training on business practices and performance, it was found that record management practices of participants significantly increased by 39.5 percentage points. Similarly, membership of street foods association, commitment to association and level of cooperation of vendors participating in the training significantly increased by 19.4, 35 and 21.5 percentage points, respectively. However, impact on daily profit margin of participating vendors only increased by 6.7 percentage points albeit not statistically different from non-participants. Table II shows that the daily sale of a typical vender in this study was GHC 364.5 (about US$ 144.3) with a profit margin ratio of 17.6 per cent representing GHC 64.2 (US$ 20.1). This implies that a 6.7 per cent increase in daily profit margin will amount to GHC 4.3 (US$ 1.34). Thus, all things being equal, it will take about 67 working days for vendors to recoup their investment in the training programme, assuming they had paid to participate.

Duration of course and graduation requirement

Training lasted five days with a training session typically lasting four hours each day. On the first day of the training, participants were informed of the need to attend at least 75 per cent of the training in order to qualify for graduation and receive certificate of participation. Only one of those who turned up on the first day of the training could not meet this graduation requirement. A graduation ceremony was organised on the last day.

Invitation of participants

Training participants were invited to the programme through official invitation letters which were hand-delivered. However, in cases where letters could not be delivered in person, they were contacted via their mobile phones. The letter explained the rationale for the training, the date and time, venue and the incentive package such as course certificate, T-shirt, lunch and snack, transportation arrangements and other allowances to take care of costs that vendors might have incurred to attend the programme. As a way of reminder, each invitee was contacted through their mobile phones on three occasions after the letters have been handed over to them. These are three days before the training, a day before the training and the morning before the commencement of the training.

Data issues

Baseline survey was conducted between May and June of 2013 after an initial reconnaissance study. A broad spectrum of data was gathered during this survey. These include vendors' demographic characteristics, business objectives, business constraints, size of workforce, business experience, cost and revenue of the business activities, business assets, history of business, membership of and commitment to street food vendor associations, knowledge and practices of the components of the training programme, and history of training received.

The training intervention was offered between the last week of January 2014 (in Kumasi) and the third week of February 2014 (in Tamale). These correspond to seven months after the baseline survey. In all, take up rate of the training was approximately 45 per cent (142 out of 314 invitees participating) with one vendor not meeting the graduation requirement of 75 per cent participation. This person is therefore considered as not to have attended the training at all. Data on reasons for non-participation were collected through the phone where possible and on-site visit when a vendor could not be reached on the phone. Although the study could have waited until the follow-up survey (5-6 months after the training) to collect these data, it was expected that it will be easier to contact non-participants a week after the training relative to doing so at the follow-up survey stage.

Method of data analysis

In order to understand the factors that influence an invitee's decision to participate in the training the study used a probit model to estimate the probability of attendance given the characteristics of the vendor and his/her enterprise.

The probit model is given by:

$$P(y=1|x_i) = \Phi(x\beta)$$

where x_i are vectors of independent variables and β are the coefficients of these independent variables. Φ indicates the cumulative standard normal probability distribution function.

Empirically, the probit model is given by:

$$P(y=1|x_i) = \Phi(\beta_0 + x_1\beta_1 + x_2\beta_2 + x_3\beta_3 + \cdots + x_{10}\beta_{10})$$

β_0 is the constant term, β_1 to β_{14} are the coefficients of the independent variables 1 to 14 and x_1 to x_{10} are the independent variables defined in Table I.

The marginal effect of the probit model which is easier to interpret than the coefficients is given by:

$$\partial P/\partial x_j = \phi(x'\beta)\beta_j$$

where ϕ denotes the standard normal probability density function.

Determinants of participation in business management training

Review of limited literature on the subject of determinants of participation in business management training revealed the following relationships between owner/manager as well as enterprise characteristics and participation. These relationships guided the choice of explanatory variables in the model of determinants of participation as well as the a priori signs.

Experience

It was expected that experience will be negatively related to the probability of attendance. De Mel *et al.* (2012) found younger firms (operating for less than five years) to be more likely to attend management training organised for women engaged in several low income

Characteristics	Expected sign
Dependent variables	
Participation; 1 = attended the training, 0 = otherwise	
Vendor Characteristics	
X_1 = Sex (male = 1, female = 0)	+
X_2 = Education (years of formal education of vendors in years)	+
X_3 = Experience (number of years vendor has been involved in food vending)	–
X_4 = Involvement in other economic activity aside food vending (Yes = 1, No = 0)	–
X_5 = Training experience (ever benefited from training Yes = 1, No = 0)	–
Enterprise Characteristics	
X_6 = Number of trusted hands in the business	+
X_7 = Location (Kumasi = 1, Tamale = 0)	+
X_8 = Distance between business premises and training venue	–
Vendors' practices of standard business management principles	
X_9 = Baseline business management practice index	–
Pre-training performance	
X_{10} = Daily gross margin ratio	–

Table I. Definition of variables used in the probit analysis and their expected signs

economic activities such as sewing. Experienced vendors appear to be less interested in courses that aim at capacity building since they believe the continued existence of their businesses is a sign of their competence. As reported by Posthuma and Campion (2009), experienced employees are less motivated to attend training programmes. The level of motivation is also positively related to the probability of participation (Noe and Wilk, 1993).

Education

Educated vendors are more likely to take up the training invitation due to the value they place on education. Moreover, vendors with little or no formal education are more likely to be intimidated from attending due to their own perceived knowledge gap. Bjorvatn and Tugodden (2010) in their study of microfinance clients in Tanzania found that entrepreneurs with higher education had a higher probability to take up training offer and attend consistently. This is corroborated by De Mel *et al.* (2012) in their study of the impact of management training on the performance of women in Sri Lanka. On the hand, Karlan *et al.* (2014) did not find education of manager/owner as a significant predictor of whether an invitee would take up consulting services in their experimental study among micro and small tailors/dressmakers in Ghana.

Sex

Street food vending is dominated by females (Otoo *et al.*, 2011) with little or no formal education. Blomquist also indicated that women are more motivated to attend any kind of training than men. Green (1993) and Veum (1993) have, however, reported findings to the contrary. They found men to be more likely to engage in further training programmes relative to their female counterparts.

Involvement in other economic activity

Vendors involved in other economic activity, either primarily or secondarily, are less likely to participate and do so consistently. These vendors are expected to have a very tight schedule and hence minimal or no time available to take up the training course.

Training experience
Vendors who have ever attended any training programme prior to the invitation are less likely to take it up. This is because most vendors during the reconnaissance and baseline surveys complained of deriving little or no benefit from previous training that principally focussed on food safety, health certification procedure and management of urban space.

Size of enterprise
The size of enterprise is expected to be positively related to the probability of participation. Having another hand to steer the affairs of the business affords the vendor the opportunity to stay away from business without the need to stop operations.

Pre-training business management practices score
Vendors with higher score in pre-training business management practices index are more likely to be more educated. This in turn increases the probability that they will participate. The only study that reported the effect of baseline score on business practice (De Mel *et al.*, 2012) did not find any significant relationship between the two variables.

Pre-training performance
Vendors with high pre-training performance are less likely to take up training offer either because they feel they are already doing well enough or have a higher opportunity cost of participation or both.

Results and discussions

Descriptive statistics
From Table II, the proportion of females receiving training invitation (91.4 per cent) is consistent with the dominance of females in the street food trade (Mensah *et al.*, 2002; Otoo *et al.*, 2011). Comparing the sex distribution of vendors that met the study criteria with those invited for the training shows that the two groups are very similar. In Tamale, the dominance of female is almost 100 per cent. Street food vending is the principal and the only economic activity for most of them (82.8 per cent). Only 17.2 per cent of the invited vendors were involved in any secondary economic activity and this is similar to the 15.9 per cent among the population of stationary vendors. Although the average years of formal education is approximately six for the pooled sample, there exist a remarkable disparity between Kumasi (approximately nine years) and Tamale (approximately four years). In terms of training experience, only 22.3 per cent of the invited vendors had had any form of training prior to receiving our invitation letter. Almost none of these training had business management training as its focus (most regulation, hygiene and food safety trainings are offered). A typical vendor is 39 years old, has a total firm size of almost six workers, has an average of six years of formal education and has been involved in street food vending for about eight years. In financial terms, a typical vendor invited to the training makes a daily sales revenue of approximately GH¢ 364, and a profit margin of almost 18 per cent. Table II generally shows that the characteristics of the vendors invited to the training programme were similar to the total population of 516 stationary vendors who had been in operation for at least three years and had a workforce of not less than three. This implies that the subset randomly selected for the training programme is representative of food vending firms that met the above-mentioned criteria.

Table II. Descriptive characteristics of invited vendors and baseline businesses characteristics

Variable	Pooled sample meeting study criteria ($n=516$)	Total Invited Vendor ($n=314$)	Kumasi ($n=112$)	Tamale ($n=202$)
Categorical variables	Per cent	Per cent	Per cent	Per cent
Sex of owner/manager				
Female	90.9	91.4	77.7	99.0
Male	9.1	8.6	22.3	1.0
Involvement in other economic activity				
Yes	15.9	17.2	12.5	19.8
No	84.1	82.8	87.5	80.2
Location				
Kumasi	39.9	35.7	100.0	–
Tamale	60.1	64.3	–	100.0
Previous training experience				
Yes	14.3	22.3	32.1	16.8
No	85.7	77.7	67.9	83.2

	Pooled (516)		Invited vendors (314)		Kumasi (112)		Tamale (202)	
Continuous variables			Mean	SD	Mean	SD	Mean	SD
Age of owner/manager (years)	38.9	9.1	39.1	9.2	37.1	10.6	39.1	7.4
Educational level (years)	5.9	5.0	5.8	5.0	9.2	3.9	3.9	4.5
Size (total workforce)	5.3	4.4.	5.6	5.0	5.2	5.0	5.2	4.7
Total family member involved in the business	1.6	1.4	1.7	1.6	1.1	1.3	2.0	1.6
Experience (years of operation)	9.7	6.4	8.5	5.8	8.4	6.3	8.5	5.6
Average daily sales (GH¢)	357.6	301.7	364.5	320.7	455.1	415.6	315.4	240.8
Gross margin ratio (%)	18.5	11.8	17.6	9.5	16.8	10.9	18.1	8.6

Notes: SD = Standard deviation (US$ 1.00 = GH¢ 2.03 as at 30 June 2013; US$ 1.00 = GH¢ 3.19 as at 22 November 2014)

What determines a vendor's decision to participate in the training given invitation?

Table III presents results of probit analysis to determine factors that affected an invited vendor's decision to honour the invitation by attending the course. The first column shows estimates from the pooled sample while columns 2 and 3 are the city-specific estimates.

Results of the pooled sample column indicate that the more a vendor is educated the higher the probability of participation. Receiving an additional year of formal education increased the probability of attending by approximately 2 percentage points at 5 per cent significance level. This result is consistent with that of Bjorvatn and Tugodden (2010) who found that entrepreneurs (who were clients of microfinance institutions in Tanzania) with higher education had a higher probability to take up training offer and attend consistently. Similarly (De Mel *et al.*, 2012) in their study of the impact of management training on the performance of women in Sri Lanka found positive relationship between educational level of invitees and participation. On the other hand, Karlan *et al.* (2014) did not find education of manager/owner as a significant predictor of whether an invitee would take up training programme in the form of consulting services in their experimental study among micro and small tailors in Ghana. In the opinion of Bjorvatn and Tugodden (2010), weaker entrepreneurs are intimidated and discouraged from attending by their own perceived knowledge deficiencies.

Table III. Probit estimates of factors determining take of training

	Pooled ($n = 314$)		Kumasi ($n = 112$)		Tamale ($n = 202$)	
	Marginal effects	Robust SE	Marginal effects	Robust SE	Marginal effects	Robust SE
Sex (Male = 1)	0.123	(0.124)	0.120	(0.113)	0.022	(0.326)
Education (years)	0.015**	(0.007)	0.021*	(0.012)	0.014	(0.009)
Engaged in 2^0 economic activity	−0.338***	(0.096)	0.090	(0.142)	−0.413***	(0.111)
Experience in food vending (years)	0.007	(0.005)	0.003	(0.008)	0.014	(0.007)
No. of trusted hands in business	0.039*	(0.021)	0.017	(0.038)	0.044	(0.027)
Training experience (Yes = 1)	0.071	(0.079)	0.301***	(0.095)	−0.075	(0.111)
Location (Kumasi)	−0.357***	(0.069)	–	–	–	–
Distance from biz to training (km)	−0.014***	(0.005)	−0.025***	(0.007)	−0.011	(0.007)
BMPI (min = 0; max = 3)	0.062	(0.049)	0.023	(0.068)	0.062	(0.063)
Daily gross margin ratio	0.006*	(0.003)	−0.001	(0.0003)	0.011	(0.004)
Observations	314		112		202	
Pseudo R^2	0.1312		0.1701		0.1388	
Wald χ^2	49.36***		24.07**		31.08***	
Log pseudolikelihood	−184.531		−56.349		−116.119	

Notes: $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.001$

The study also found in discussions with invitees that the less educated vendors had lower appreciation of education and the potential benefits/importance of the training programme. As expressed by one fufu vendor in Kumasi: "this is what I have been doing since I was a young girl. I took over from my mother and have actually been doing this for well over 20 years so I really do not see anything about operating a "chop bar" [7] that I do not know". Moreover, vendors with some level of formal education (especially up to senior secondary level) considered a course that offered a certificate from a university as a unique opportunity to add to their moderate academic qualification.

The study also found vendors who were engaged in some other form of economic activity had street food vending as a secondary economic activity were about 34 per cent and 41 per cent significantly less probable to participate in training programme in the case of the pooled sample and Tamale, respectively. Secondary economic engagements limit the time available to the vendor and increase his/her opportunity cost of participation.

The initial inclusion of firm size (measured by total workforce) in the probit model did not have any effect on participation. Although the study's decision to purposively sample only firms with at least two individuals (i.e. the owner/manager and an additional worker) with the expectation that attending the training will not stall business operations, businesses with larger workforce appeared to have a higher opportunity cost of attending the training. Qualitative information also suggests that larger workforce imposes extra requirement to strictly monitor and supervise employees' activities in order to ensure that things are done according to expectation. In effect, it appears that the total workforce does not necessarily increase the probability of participation as we expected. Rather, the presence of a trusted person does. In view of these reasons, firm size was dropped and replaced with number of trusted hands available in the business.

Result on the involvement of a trusted hand (either in the form of an employee or a close relation) in the business indicates that the probability of attending the training programme in the pooled sample increased by 4 per cent (at 1 per cent significance level) with each additional person. The effect is, however, insignificant for the split samples (Kumasi and Tamale). The presence of these trusted employee or relation signifies the availability of a reliable supervisor who will operate the business and take over critical activities such as handling of finances in the absence of the owner and managing customer relations. In the words of a vendor: "you can never trust these workers in your absence. But if you are fortunate to have one of your own, I mean a close family member around, it gives you the assurance that your money will be safe even if you are not around. Even in the worst case where your own relative 'takes your money' it is still in the family".

The results of the pooled sample also show that invited vendors form Kumasi were about 36 per cent less likely to attend. A possible explanation is that whilst check-check vendors from Kumasi principally operate at night and therefore needed to prepare and setup between 16:00 GMT and 18:00 GMT, whilst those involved in the sale of fufu would be at the peak of their sales between 12:00 GMT and 14:00 GMT where the training took place. Inasmuch as the study tried to get the best time that would suit both group of vendors, most of these vendors still found the time not conducive.

Distance between vending premises and training centres had significant negative effects on vendors' participation in the training programme. This negative effect is significant both for the pooled and Kumasi samples. Qualitative data gathered through post-training discussions with vendors shows that, the venues of the training coupled with the fact that invitation to the programme covered all sub-metros of the two cities made it practically difficult for some of those very far from the training venue to attend although the study tried to overcome this by providing shuttle services at a central location. At last, vendors with higher gross margin ratio (i.e. those able to retain more of their sales revenue as gross profit) had a higher probability to attend albeit by only approximately 1 per cent in the pooled sample (Table IV).

Reasons for non-participation in the training programme

In order to understand the reasons behind the high rate of non-participation, phone interviews were conducted with non-participants a week after the training. Most of the vendors (52 representing 30.1 per cent) were of the opinion that the number of days as well as the number of hours per day were too long for them to be absent from their businesses. For these vendors, they were simply deterred by the duration. Other vendors (38) expressed interest in the course and considered it a reasonable investment worth the time of absence from their businesses. However, they felt uncomfortable in leaving their businesses in the hands of their workers. In the words of a food vendor in Kumasi "I really wish I could attend the training but that will mean virtually not working for these days because I do not see how I can leave my business in the hands of these workers. They may either misappropriate my finances or I might lose my customers if they do not meet me at work for five consecutive days".

Approximately 18 per cent (31) of the non-participants felt discouraged by their level of literacy. Although the invitation explicitly stated that the training would be held in local dialects (Twi in Kumasi and Dagbani in Tamale) as well as in an adult learning environment, some of the non-participating vendors thought a training programme

Reasons for non-participation	Pooled sample Frequency	Kumasi Frequency	Tamale Frequency
Difficulty in leaving business for workers	38 (22.0)	15 (19.0)	23 (24.5)
Duration (number of days and hours per day) too much	52 (30.1)	28 (35.4)	24 (25.5)
Didn't see the importance	11 (6.4)	3 (3.8)	8 (8.5)
Training venue too far and inconvenient for me	18 (10.4)	12 (15.2)	6 (6.4)
Family/personal issues problems (ill health, given birth, funeral, etc.)	17 (9.8)	10 (12.7)	7 (7.4)
Was out of business (temporary/permanently), had been evicted	6 (3.5)	4 (5.1)	2 (2.1)
Thought it would be for literates and the educated	31 (17.9)	7 (8.9)	24 (25.5)
Total	173	79	94

Note: Figures in parenthesis of each column are percentages of their respective column totals

Table IV. Reasons why vendors decided not to participate in the training organised by a university was meant for the literate and the educated. In total, 17 vendors said they could not attend the programme due to their engagement with other family/personal matters such as their responsibility of cooking family dinner, ill health, baby nursing, marriage and funerals during the time of the training. Some vendors (11) told us outright that they felt the course was of no importance to their business hence their decision to decline participation. To them they have been managing their businesses successfully for a long time and did not need any further training on business management. In total, 10.4 per cent (18) vendors felt the training venue in both cities, especially Kumasi, were very from their vending premises and very inconvenient for them to move to and from the central point where transportation services were provided. Six vendors were either permanently or temporary out of business and therefore felt training was not a priority.

Conclusions and recommendations

Given that business management training has the potential to improve performance of MSEs, it is surprising why participation rates in most freely offered management training courses remain low. The study was premised on the assumption that a profit maximising firm will decide to invest in the firm's human resources if they perceive the expected future benefits to be higher than the cost (direct explicit payments and forgone earnings). This expectation (and by inference the choice) is also influenced by vector of enterprise and vendor characteristics. The study aimed at understanding the factors that determine a street food vendor's decision to participate in a freely offered entrepreneurship and business management training conducted among a random sub-sample of 314 street food enterprises from Kumasi and Tamale metropolises of Ghana. The study also sought to understand the specific reasons given by vendors for their inability to participate.

Results show that whilst vendors with higher formal education better appreciate the benefits of education and training and hence more likely to participate, their counterparts with fewer years of schooling do not. The latter's perceived knowledge deficiencies appear to explain the difference in participation rates. The study also found vendors who were engaged in some other form of economic activity or had street food vending as a secondary economic activity were significantly less probable to participate in training programme as these secondary economic engagements limit the time available to the vendor and increase his/her opportunity cost of participation. Total workforce does not necessarily increase the probability of participation, especially when there are no trusted workers in the business who will take over critical activities such as handling of finances in the absence of the owner. In effect, it appears that the total workforce does not necessarily increase the probability of participation as expected. Rather, the presence of a trusted person (preferably, a family member) does. The study also found that distance between vending premises and training centres had significant negative effect on vendors' participation in the training programme. Businesses that appear to be performing relatively better in terms of profit margin were also more likely to attend and do so more frequency. Results of the study show that participants appear to expect future benefits that exceed the opportunity cost of participation relative to non-participants.

The study makes several recommendations aimed at guiding future implementation of training programmes. First, training programmes for informal sector managers/owners, especially for female dominated sectors like street food vending, should be spread over a period of at least four weeks with the training time per day reduced to a maximum of one hour. A reduction in the time a vendor has to be absent from her/his workplace will likely increase participation. Moreover, this will help reduce the number of topics that need to be covered in a day and afford trainees the opportunity to assimilate each day's content before adding extra topics. Although the cost of training may go up due to the prolonged duration, it is recommended that engaging local business development service providers on hourly basis may help address the challenge of having to keep trainers for several days, considering the pedagogical advantage of such a module. Second, the training venue should also be strategically located in a central and easily accessible place that is within the "natural environment" of trainees. This will reduce the difficulty and the time a trainee has to spend in either moving from home or business premises to training venue.

Also, future studies should explore the possibility of delivery similar training at a fee. The amount of fees to charge should be informed by findings from studies that assess the amount vendors are willing to pay. Based on the cost of the training (US$ 90.5) and the corresponding increase in daily profit margin of US$ 1.34 for participants, the study projects that the training would have paid for itself in 67 working days had participants paid for the service. Fourth, measures should be put in place to get invitees to feel confident even in situations where they feel intimidated by their low or no formal educational background. One way would be to use other illiterate vendors who have benefited from past training and have success stories to help in sensitising invitees on the benefits and more importantly, the fact that such courses are not necessarily meant for the educated. In terms of content, the study proposes that a module on business continuity and succession plan should be added to training syllabus. This, in the long-run, will lead to the creation of informal enterprises that can still run even in the absence of the owner/manager. Moreover, it is important that training programmes aimed at SMEs in the informal sector be tailored to suit the sector-specific needs. These needs should in turn be the results of empirical needs assessment that employs a multi-stakeholder approach. It is believed this will encourage participation, understanding and take up of training content.

Notes

1. Fufu is a staple starchy food prepared by pounding boiled cassava and plantain together in a mortar and pistle, while continuously turning it with the hand. Fufu can also be prepared from boiled cocoyam or yam. Fufu is usually served and eaten with soup.
2. Check-check is a food vending outlet that serves mostly fried rice and jollof rice. Fried rice is prepared by steaming boiled rice, vegetables and spices together. Jollof on the other hand is prepared by boiling rice together with tomato sauce/stew.
3. Waakye is prepared by boiling rice and beans together. It is usually served with a hot sauce, spaghetti, gari and vegetable salad.
4. Tuo zaafi is a maize or millet dough and cassava dough dumplings prepared and served with green leafy vegetable soup.
5. Apart from their dominance in terms of numbers and preference by the local populace these limitations to some extent are also influenced by the focus of the broader Ghana street foods project with includes food quality, food safety and nutrition. These foods are critical in these regard.
6. Using an exchange rate of GHC 3.19 to US$ 1 at the time of training.
7. Chop bar is a popular expression for a local restaurant that principally specialises in the sale of fufu, although other local dishes such as banku, rice balls may be added.

References

Becker, K.F. (2004), "The informal economy", SIDA Report, Stockholm, March.

Berge, L.I.O., Bjorvatn, K. and Tungodden, B. (2011), "Human and financial capital for microenterprise development: evidence from a field and lab experiment", NHH Department of Economics Discussion Paper No. 1/2011, Bergen.

Bjorvatn, K. and Tugodden, B. (2010), "Teaching business in Tanzania: evaluating participation and performance", *Journal of the European Economic Association*, Vol. 8 Nos 2-3, pp. 561-570.

Bloom, N., Eifert, B., Mahajan, A., McKenzie, D. and Roberts, J. (2013), "Does Management Matter? Evidence from India", *The Quarterly Journal of Economics*, Vol. 128 No. 1, pp. 1-51.

Blundell, R., Dearden, L., Meghir, C. and Sianesi, B. (1999), "Human capital investment: the returns from education and training to the individual, the firm and the economy", *Fiscal Studies*, Vol. 20 No. 1, pp. 1-23.

Bruhn, M. and Zia, B. (2013), "Stimulating managerial capital in emerging markets: the impact of business and financial literacy for young entrepreneurs", *Journal of Development Effectiveness*, Vol. 5 No. 2, pp. 232-266.

Bruhn, M., Karlan, D. and Schoar, A. (2012), "The impact of consulting services on small and medium enterprises: evidence from a randomized trial in Mexico", Working Paper No. 100, Yale Economics Department, New Haven, CT.

Charmes, J. (2000), "The contribution of informal sector to GDP in developing countries: assessment, estimates, methods, orientations for the future", Paper presented at the Fourth Meeting of the Expert Group on Informal Sector Statistics (Delhi Group), Geneva, 28-30 August.

De Mel, S., McKenzie, D. and Woodruff, C. (2012), *Business Training and Female Enterprise Start-up, Growth, and Dynamics: Experimental Evidence from Sri Lanka*, Mimeo, World Bank, Washington, DC.

De Soto, H. (1989), *The Other Path: The Invisible Revolution in the Third Sector*, Harper and Row, New York, NY.

Drexler, A., Fischer, G. and Schoar, A. (2010), "Keeping it simple: Financial Literacy and Rule of Thumbs", Mimeo, London School of Economics.

Fatoki, O.O. (2011), "The impact of human, social and financial capital on the performance of small and medium-sized enterprises (SMEs)", *Journal of Social Sciences*, Vol. 29 No. 3, pp. 193-204.

Fields, G. (1975), "Rural-urban migration, urban unemployment and underdevelopment, and job-search activities in LDCs", *Journal of Development Economics*, Vol. 2 No. 2, pp. 165-187.

Food and Agriculture Organization (2009), "Good hygienic practices in the preparation and sale of street foods in Africa: tools for training", Rome, available at ftp://ftp.fao.org/docrep/fao/012/a0740e/a0740e00.pdf (accessed 4 November 2012).

Gine, X. and Mansuri, G. (2011), "Together we will: experimental evidence on female voting behaviour in Pakistan", Policy Research Working Paper Series No. 5692, World Bank, Washington, DC.

Green, F. (1993), "The determinants of training of male and female employees in Britain", *Oxford Bulletin of Economics and Statistics*, Vol. 55 No. 1, pp. 103-122.

Ishengoma, E.K. and Kappel, R. (2006), "Economic growth and poverty: does formalisation of informal enterprises matter?", Working Paper No. 20 GIGA, Munich.

Kapila, S. and Mead, D. (2002), *Building Business with Small Producers: Successful Business Development Services in Africa, Asia and Latin America*, International Development Research Centre, Ottawa.

Karlan, D., Knight, R. and Udry, C. (2014), "Consulting and capital experiments with micro and small tailoring enterprises in Ghana", working paper, available at: http://karlan.yale.edu/p/ghanatailors_October2014_v11.pdf (accessed 22 October 2014).

McKenzie, D. and Woodruff, C. (2014), "What are we learning from business training and entrepreneurship evaluations around the developing World?", *The World Bank Research Observer*, Vol. 29 No. 1, pp. 48-82.

Marshall, A. (1987), "Non-standard employment practices in Latin America", Discussion Paper No. 6, Labour Market Programme, Geneva: International Labour Office.

Martínez, C.A., Puentes, E. and Ruiz-Tagle, J. (2013), "Micro-entrepreneurship training and asset transfers: short-term impacts on the poor", Working Papers No. 380, Department of Economics, University of Chile, Santiago, available at: https://ideas.repec.org/s/udc/wpaper.html

Mensah, P., Yeboah-Manu, D., Owusu-Darko, K. and Ablordey, A. (2002), "Street foods in Accra, Ghana: how safe are they?", *Bull WHO*, Vol. 80 No. 7, pp. 546-554.

National Board for Small Scale Industry (2014), available at www.nbssi.org/ (accessed 3 March 2014).

Noe, R.A. and Wilk, S.L. (1993), "Investigation of the factors that influence employees' participation in development activities", *Journal of Applied Psychology*, Vol. 78 No. 2, pp. 291-302.

Otoo, M., Fulton, J., Ibro, G. and Lowenberg-Deboer, J. (2011), "Women entrepreneurship in West Africa: the cowpea street food sector in Niger and Ghana", *Journal of Development Entrepreneurship (JDE)*, Vol. 16 No. 1, pp. 37-63.

Posthuma, R.A. and Campion, M.A. (2009), "Age stereotypes in the workplace: Common stereotypes, moderators, and future research directions", *Journal of Management*, Vol. 35 No. 1, pp. 158-188.

Sullivan, A. and Sheffrin, D.M. (2003), *Economic Principles in Action*, Pearson Prentice Hall, Upper Saddle River, NJ.

Valdivia, M. (2012), "Training or technical assistance? A field experiment to learn what works to increase managerial capital for female micro-entrepreneurs", CAF Working Paper No. 2011/02, Lima, available at: www.caf.com/media/3891/201102GRADEmarzo2011.pdf (accessed 1 July 2014).

Veum, J.R. (1993), "Training among young adults: who, what kind, and for how long?", *Monthly Labour Review*, Vol. 116 No. 8, pp. 27-32.

Further reading

Brüderl, J., Preisendörfer, P. and Rolf, Z. (1992), "Survival chances of newly founded business organizations", *American Sociological Review*, Vol. 57 No. 2, pp. 227-242.

De Mel, S., McKenzie, D. and Woodruff, C. (2014), "Business training and female enterprise start-up, growth, and dynamics: experimental evidence from Sri Lanka", *Journal of Development Economics*, Vol. 106, pp. 199-210.

Drexler, A., Fischer, G. and Schoar, A. (2011), "Keeping it simple: financial literacy and rules of thumb", Paper presented at CEPR Development Economics Workshop Sant Benet Monastery (Manresa) Barcelona, 8-9 October 2010, available at: www.cepr.org/meets/wkcn/7/784/papers/FischerFinal.pdf (accessed 4 March 2013).

Karlan, D. and Valdivia, M. (2011), "Teaching entrepreneurship: impact of business training on microfinance institutions and clients", *Review of Economics and Statistics*, Vol. 93 No. 2, pp. 510-527.

Mano, Y., Iddrisu, A., Yoshino, Y. and Sonobe, T. (2011), "How can micro and small enterprises in Sub-Saharan Africa become more productive? The impacts of experimental basic managerial training", *World Development*, Vol. 40 No. 3, pp. 458-468.

Walker, E., Redmond, J., Webster, B. and Le Clus, M. (2007), "Small business owners: too busy to train?", *Journal of Small Business and Enterprise Development*, Vol. 14 No. 2, pp. 294-306.

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