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Article

Quality of Work Life (QoWL) and perceived workplace commitment among seasonal farmers in Nigeria

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Abstract: The study set out to forge research around on the impact of Quality of Work Life (QoWL) in Low and Middle Income Countries (LMICs) and farm workers perception on how both intrinsic and extrinsic controls element within and outside the work setting impact on their productivity within the farming industry in Nigeria. To our knowledge, this is the first study that has considered QoWL among farm workers in Nigeria. Farm workers in the Middle belt region in Nigeria (n= 435) were surveyed using QoWL questionnaire consisting of 32 Likert scale items to measure their perceived quality of work life based on seven dimensional factors around. Results indicated that more than half (60.6%) of the sampled group confirmed working far above the national working hours of 40 hours per week. Significant difference exist between respondent gender on control at work-CAW (F=10.03, p < .001) and working conditions-WCS (F=12.04, p < .001) with women having better QoWL. Farm workers job satisfaction especially in (LMICs) is important element that can lead to high productivity and sustainability of the sector. To achieve a level of sustainability and food security in country, there is the need to improve opportunities for greater stability among farmers. Farm workers could benefit from tailored training initiatives around stress management, work life balance as well as workplace safety, health and wellbeing as a means of boosting their confidence and enhance sustainable productivity. In addition, the paper holds the potential to inform framework development for assessing QoWL within the farming industry in the country and allow further research around impact of job insecurity, on the nation food security.

Keywords: Quality of Work Life; stress; wellbeing; productivity; social sustainability; LMICs

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1. Introduction

The American Automobile Industry Association was the first body that considered Quality of Work Life (QoWL) among its members and called for more attention on employee's welfare and health over financial turnover [1]. QoWL denotes employees' perception and experience of their working environment, which involves employees' perception of physical and psychological well-being obtained from their work [2]. In its broad sense when assessing employees QoWL, areas that include interpersonal relationship, workplace management, work-family relation, and employees' balanced relationship with the organization, work, and family need should be considered. In the western world, several studies have examined QoWL among farmers, and concluded that more focus is required on their welfare and work life balance, as they form an important component of nation's labour force [2-4].

The agricultural sector plays an important role toward the enhancement of a nation's economy boast. In addition, the zero hunger fight and promotion of economic growth as

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part of the sustainable development goals has seen the rise in agricultural enterprise especially in low-and-middle income countries (LMICs). However, most agricultural activities in the LMICs context are manually driven and has attendant health and safety challenges [4-5]. Nigeria, like other LMICs, has agriculture as a major contributor to its economy with more than half of the active population engaged in different forms of agricultural practices and Olowogbon et al., [4], stated that 80% of Nigerian population are small-holders' farmers.

Despite the prominent role of agriculture in poverty reduction in Nigeria, agricultural practices are still hazardous thereby exposing farm workers to several work-related risks including agricultural stressors [5-6]. To meet up with these challenges, the Food and Agricultural Organisation (FAO) sustainability assessment of Food and Agriculture systems (SAFA) guideline [7], has placed emphasis on four dimensions to sustainability that include good governance, environmental integrity, economic resilience and social well-being. Where the social sustainability approach shall encourage the promotion of decent livelihood, labour right, human and safety among other set values. Considering the amount of time farmers spent working out and in most cases in an unfavourable weather condition, it is paramount that these employees have certain degree of satisfaction around their quality of life at work as it relate to their physical, psychological and spiritual well-being [8-9]. In addition to this, work related stress is widespread among farm workers, and it serve to impact on their QoWL.

Several factors have been identified as adding to stress level experienced among farmers and workers in the agricultural sector. These include personal hazards, time pressure, job insecurity, poor work condition, absence of control over work demand, lack of support and poor work life balance [10-14]. On this note, Elkington [15] opined that it might prove harder for any community to address environmental, economic and social sustainability without taking into account the tight relationship that abound among these tripods as such there is the need to consider the role of QoWL as an indicator for long term sustainability drive within every system.

In addition, there is no doubt that the COVID-19 pandemic may have impact on the QoWL of agricultural workers by heightening already existent unsatisfactory working conditions, as well as negatively affect workers' productivity [16]. To be able to improve employees engagement and the delivery of better performance, there is the need for an approach that allow measurement of both extrinsic and intrinsic factors that include employee engagement, satisfaction and commitment level to enable the organisation to compete favourably with any of its competitors [17-18]. Most often efforts to conceptualise and measure a "healthy workplace" has placed more emphasis on work related injuries, accidents and illness. However, a balance that offer the needed internal relations conducive to good health and well-being among these employees are areas that require further strengthening [19-20].

Although several authors have made effort at defining QoWL, in sum, it is the total quality of an employee's work-life within an organisation. QoWL among employee's impact on the way they respond to their establishment, job satisfaction, job involvement, performance, absenteeism rate and employee turnover [14, 17, 21-22]. In addition, QoWL does affect both job satisfaction as well as satisfaction derived from other life domain that include family, leisure, social and economic aspects of an individual. QoWL should be considered as a process by which an organisation reacts to their employee requirements aimed at putting in place mechanisms capable of allow offering them chance to take part in decisions making likely to impact on their lives at work [23]. Hence the need to ensure that factors that contribute to improvement of QoWL are considered in other to ensure employees are guaranteed good work experience with bosses and or subordinates [24-25].

As earlier identified low QoWL among employees can lead to high rate of absenteeism, early retirement, poor professional conduct, among others, which can present series of effects on individual's health and relationships developed [22,26]. Above all, successful organisation are evidenced to have invested much around their human capital and creation of workplace climate that guarantee job satisfaction with tangible results evident

among their employees quality of life. The approach enhance successful maintenance of steady supply level of employment within the agriculture sector to guarantee sustainable food security.

The aim of the paper is to expand research around the impact of Quality of Work Life (QoWL) in Low and Middle Income Countries (LMICs) and farm workers perception on how both intrinsic and extrinsic controls element within and outside the work setting impact on their productivity within the farming industry in Nigeria while advancing measures to help strengthen the social dimension to sustainability within the sector.

2. Materials and Method

2.1. Respondent

Farm workers drawn from private and government farms located in middle belt region of Nigeria that comprises of Benue, Kaduna and Plateau states, took part in the study. Recruitment period was 40 days within which a sample of 435 consenting farmers, volunteered to take part in the study and provided their position around the questions asked. Quality of working life questionnaires [27] were distributed via online survey platform (Online Survey, JISC, Bristol, UK). Inclusion criteria were; employees of the private and public-owned farms, individuals whose main source of income is through farm work, beyond the age of 18 and are able to communicate in English. All subjects gave their informed consent for inclusion before they participated in the study. The study was conducted in accordance with the Declaration of Helsinki, and the protocol was approved by the Department of Agricultural Technology, Forestry Research Institute of Nigeria. Jos, Ethics Committee.

2.2. Instrumentation

The QoWL questionnaire consisted of 32 Likert scale items (from totally disagreed = 1 to totally agreed = 5) that seek to measure farm workers perceived quality of life based on seven dimensional factors around; Controls at work-CAW: General Wellbeing-GWB: Home-Work Interface- HWI: Job Career Satisfaction-JSC: Stress at work-SAW: Working Conditions-WCS and Employee Engagements-EEN [27]. Other background information were included in the question; age, gender, typical work hour per week, emolument mode of payment, number of days off work due to ill health and caring responsibility respectively.

2.3. Data analysis

Analysis of data was undertaken using SPSS 23.0 software package for Windows. Raw data collected were inspected and cleaned to remove cases with empty or greater percentage of missing items/responses. Cronbach's alpha coefficient was used to assess the internal reliability of the set of items based on the seven factor domains; CAW, EEN, GWB, HWI, JCS, SAW WCS, and summaries of overall QoWL, expressed as number between 0 and 1 [28]. The QoWL scale-2 items (continuous variables) were reported as Mean ± standard deviation, while categorical variables were presented as frequencies and percentages. To measure quality of working life among the farm workers, seven factors were considered that include control at work, general well-being, home-work interface, job and career satisfaction, stress at work, employee engagements and working conditions were evaluated. A one-way ANOVA was conducted to compare if age, gender, work pattern etc. has effect across the seven QoWL dimensions measured, in addition to scores among groups based on socio-demographic factors and QoWL domains and summaries. Statistical significance was set at p < 0.05.

3. Result 148

3.1. Reliability test

Table 1 present Cronbach's alpha of > 0.70 was considered satisfactory. Reliability test using Cronbach's Alpha has been used to measure the internal consistency of variables. The Cronbach's Alpha value for the 32 items in the structured questionnaire measured at 0.892 (Table 1). Factor one measured (CAW) comprised of 3 items and relates with the level of control employees feel they have over workplace decision, the factor has a subscale reliability of 0.751. In addition, factor 3, HWI relates with family, work life balance, and retuned a sub-scale reliability of 0.737. Four items were applied (SAW) to measure extent to which employee's perception around exposure to work place pressure or stress from daily work activity involved with and returned a sub-scale reliability of 0.703.

Table 1. 32-item, 7-factor component sub-scale and overall Cronbach's Alpha for Farm workers data set.

Dimensional Factor domains	Cronbach's Alpha	No of Items	Mean ±SD
Controls at work-CAW	0.751	3	3.21±1.0
Employee Engagements-EEN	0.716	3	3.37 ± 0.6
General Wellbeing-GWB	0.756	5	3.28 ± 0.7
Home-Work Interface-HWI	0.737	3	3.25 ± 0.9
Job Career Satisfaction-JCS	0.784	5	3.27 ± 0.8
Stress at work-SAW	0.703	4	3.33 ± 0.6
Working Conditions-WCS	0.705	4	2.99 ± 0.8
QoWL	0.892	32	3.24 ± 0.6

3.2. Demographic and background variables

Table 2 depicts farm workers demographic and work-related characteristics. Overall, the survey response rate of 43.6% was highly related to interests of respondent, survey collection time, length of survey; and assurance of privacy and confidentiality. A total of 436 respondent responded to the online survey of which 47.6% are male and female respondent make up 48.5% of the respondent and 55.4% were within the age band of 25-44 years respectively. More than half (60.6%) of the sampled group confirmed working far above the national working hours of 40 hours per week as specified under the National Minimum Wage Act and only 16.3% said they do not have any form of caring responsibilities (Table 2). About half (51.2%) of the respondents received monthly salary and 15.2% of them worked despite having one form of disability or the other.

Table 2. Socio-demographics and Job Characteristics of Respondents.

	Variable/ Category	n(%)	Mean ±SD
Age			
	18- 25	23 (5.3)	
	25-44	240 (55.3)	1.55±0.57
	45-59	142 (32.7)	
	Above 60	29 (6.7)	
Gende	er (n=435)		
	Female	211 (48.5)	
	Male	207 (47.6)	2.41±0.69
	Preferred not to say	17 (3.9)	
Do yo	u have a disability?		
	Yes	66 (15.2)	1.85±36
	No	367 (84.8)	
Appro	ximately how many hours do you work in a typical weel	k?	
	Less than 20	39 (9.0)	
	20-40	132 (30.4)	3.01±1.19
	41-50	103 (23.7)	
	51-60	105 (24.2)	
	More than 60 hrs/wk	55 (12.7)	
Appro	ximate days off work due to ill health in the last year?		
	None	67 (15.4)	
	1-5 days	166 (38.2)	

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	6-10 days	112 (25.7)	2.6±1.35
	11-15 days	55 (12.6)	
	More than 15 days	35 (8.0)	
How as	re you paid on the job?		
	Salaried (month end)	222 (51.2)	
	Hourly	98 (22.6)	1.75±.85
	Other	114 (26.3)	
Caring	responsibilities		
	No	71 (16.3)	
	Young children	168 (38.5)	
	School age children	160 (36.7)	1.59±.49
	Elderly relatives (i.e. Parents)	216 (49.5)	

3.3. Comparison between respondent' Quality of Work Life using gender and age variables measured

From the result, there was a significant difference between respondent gender on CAW (F=10.03, p < .001) and WCS (F=12.04, p < .001). Whereas six dimensions were found to have statistically significant differences with age; CAW (F = 9.03, p < .001), GWB (F = 12.39, p < .001), HWI (F =11.39, p < .001), JCS (F = 14.15, p < .001), SAW (F = 5.38, p < .001), WCS (F = 10.89, p < .001) and QoWL (F= 15.54, p < .001) respectively. Thus, indicating the existence of impact of the job nature on the QoWL among the workers. However, result of disability impact on the quality of life measure returned insignificant difference across 6 dimensions measured with the exception of CAW (F = 5.13, P = 0.024). Two questions asked to measure the stress at work (SAW) domain, 51.4% of the respondent affirmed to feeling pressured at work while 43.6% reported been stressed. Overall, women were found to have better quality of life across six domains with the exception of employee engagements (EEN) compared to the male counterparts. In addition, respondent within the age group 25-44 showed better QoWL over the remaining age group (Table 3).

Table 3. Comparison of Quality of Working Life (QoWL) Sub-scales according to the Gender and Age group of respondents.

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Variables/		CAW		EEN		GWB]	HWI		JCS		SAW		WCS		QoWL
Categories	N	Mean ±SD	N	Mean ±SD	N	Mean ±SD	N	Mean ±SD	N	Mean ±SD	N	Mean ±SD	N	Mean ±SD	N	Mean ±SD
Gender																
Male	209	3.02±0.9	211	3.40±0.6	208	3.18±0.8	211	3.15±0.9	206	3.17±0.8	208	3.32±0.6	209	2.80±0.8	198	3.14±0.5
Female	207	3.43±1.0	207	3.35±0.6	205	3.38±0.7	204	3.38±0.9	203	3.38±0.8	205	3.45±0.6	206	3.19±0.9	196	3.35±0.6
Prefer not to say	17	3.12±0.7	17	3.22±0.6	16	3.21±0.6	17	2.98±0.6	17	3.02±0.5	16	3.25±0.6	16	2.94±0.6	15	3.11±0.4
F-test		10.03**		0.99		3.55*		4.32*		4.47*		0.23		12.04**		6.77**
Age Group																
Under 25	23	3.00±0.8	23	3.33±0.6	22	2.94±1.0	23	2.77±0.8	23	2.73±1.0	23	3.05±0.8	23	2.74±0.7	22	2.94±0.6
25-44	239	3.42±0.9	240	3.41±0.6	239	3.46±0.7	238	3.46±0.8	237	3.47±0.8	235	3.41±0.6	238	3.18±0.9	228	3.40±0.6
45-59	141	2.92±0.9	142	3.33±0.6	138	3.03±0.7	142	3.01±0.8	137	3.03±0.7	141	3.21±0.6	140	2.71±0.8	131	3.02±0.5
Above 60	29	3.13±0.9	29	3.20±0.8	29	3.16±0.5	28	3.08±0.9	28	3.18±0.6	29	3.47±0.7	29	2.97±0.7	27	3.15±0.5
F-test		9.03**		1.33		12.39**		11.39**		14.15**		5.38**		10.89**		15.54**
Do you have	e disability	7?														
Yes	66	2.97±0.9	66	3.33±0.7	65	3.14±0.8	65	3.19±0.9	64	3.20±0.8	64	3.38±0.8	65	2.82±0.7	60	3.11±0.5
No	365	3.26±1.0	367	3.37±0.6	362	3.30±0.7	365	3.25±0.9	361	3.28±0.8	363	3.32±0.6	364	3.02±0.9	348	3.26±0.5
F-test		5.13*		0.29		2.71		0.28		0.54		0.43		3.24		3.10

^{*}p<0.05 significant, ** p<0.001 highly significant

3.4. QoWL Sub-scales according to Job Characteristics of Respondents

Table 4 presents one-way ANOVA analysis of job characteristics and its associated factors we found to have influence on QoWL among the respondent using 7 dimensions earlier mentioned. From the result, hours of work per week had significant difference with CAW (F = 18.08, P < 0.001), GWB (F = 11.77, P < 0.001), HWI (F = 18.77, P < .001), JCS (F = 13.39, P < .001), SAW (F = 3.29, P < 0.05) and WCS (F = 5.29, P < .001). There was significant difference across the farmers work hours and their overall QoWL (F = 22.71, P < .001). All but EEN (F = 0.30, P = 0.585) had significant difference with jobs requiring repeated lifting. Whereas, outcome based on comparison between farm work task requiring repetitive lifting or forceful hand movements, with the 7 QoWL dimensions revealed a highly significant difference with CAW (F = 117.53, P < .001), GWB (F = 127.23, P < .001), HWI (F = 93.88, P < .001), JCS (F = 122.90, P < .001), SAW (F = 24.66, P < .001), WCS (F = 135.33, P < .001) while EEN (F = 3.61, P = 0.058) showed no significant difference. Increased level of QoWL was highest among respondent that reported working 25-40 hours per week compared while workers who reported they are paid monthly have high QoWL over those paid weekly and daily (Table 4).

Table 4. Comparison of QoWL Sub-scales according to Job Characteristics of Respondents.

Variables/		CAW		EEN	(GWB		HWI		JCS		SAW	,	WCS		QoWL
Categories	N	Mean ±SD	N	Mean ±SD	N	Mean ±SD	N	Mean ±SD	N	Mean ±SD	N	Mean ±SD	N	Mean ±SD	N	Mean ±SD
Approximate	hrs. of wo	ork/week														
<20	39	3.23±0.8	39	3.32±0.7	39	3.30±0.9	39	3.11±1.03	39	3.42±0.9	39	3.39±0.7	39	3.01±0.8	39	3.25±0.7
25-40	132	3.70±0.9	132	3.36±0.6	131	3.58±0.7	132	3.73±0.7	128	3.66±0.7	130	3.36±0.5	131	3.53±0.8	124	3.57±0.5
41-50	101	3.17±0.8	103	3.43±0.6	99	3.30±0.7	101	3.19±0.8	99	3.34±0.6	99	3.47±0.6	101	2.86±0.7	89	3.25±0.4
51-60	105	2.74±0.9	105	3.36±0.6	104	2.96±0.7	104	2.92±0.9	104	2.83±0.8	105	3.20±0.6	104	2.52±0.7	101	2.92±0.6
> 60	55	3.05±0.9	55	3.33±0.6	55	3.11±0.7	55	2.90±0.8	55	2.95±0.8	55	3.20±0.6	55	2.80±0.8	55	3.05±0.5
F-test		18.08**		0.37		11.77**		18.77**		22.39**		3.29*		29.33**		22.71**
Approximate	days of of	ff work due to ill h	ealth in th	e last year												
None	67	3.01±1.0	67	3.24±0.7	66	3.12±0.8	67	3.13±0.9	66	3.15±0.8	64	3.23±0.6	65	2.92±0.8	62	3.10±0.6
1-5 days	165	3.39±1.0	166	3.37±0.5	166	3.36±0.8	166	3.40±0.9	163	3.40±0.9	165	3.30±0.5	166	3.19±1.0	161	3.34±0.7
6-10 days	112	2.95±0.8	112	3.38±0.7	107	3.19±0.7	110	3.13±0.8	108	3.09±0.7	110	3.37±0.6	112	2.75±0.7	100	3.10±0.5
11-15 days	54	3.28±0.9	55	3.53±0.5	55	3.41±0.7	55	3.32±0.8	54	3.28±0.7	55	3.44±0.8	53	2.91±0.7	52	3.32±0.5
> 15 days	35	3.48±0.7	35	3.33±0.7	35	3.23±0.6	34	2.99±0.8	35	3.36±0.6	35	3.31±0.6	35	3.04±0.6	34	3.24±0.4
F-test		5.23**		1.68		2.05		2.94*		3.05*		1.07		5.29**		3.87*
How are you	paid on th	ne job?														
Salaried (monthly)	222	3.39±1.0	222	3.39±0.6	221	3.32±0.8	221	3.32±1.0	217	3.34±0.9	220	3.28±0.5	221	3.11±0.9	212	3.31±0.7
Hourly	96	2.93±0.9	98	3.33±0.6	98	3.14±0.7	97	3.19±0.8	96	3.20±0.7	98	3.41±0.7	97	2.84±0.7	93	3.15±0.5
Daily	114	3.10±0.8	114	3.36±0.6	109	3.28±0.7	113	3.15±0.8	112	3.17±0.7	110	3.33±0.6	112	2.87±0.7	103	3.16±0.5
F-test		9.00**		0.28		2.17		1.65		2.19		1.38		5.042**		3.59

Job require repeated lifting, etc.

Yes	175	2.69±0.9	176	3.35±0.7	175	2.89±0.7	175	2.81±0.8	173	2.79±0.8	174	3.15±0.6	174	2.50±0.7	167	2.86±0.5
No	257	3.56±0.8	258	3.38±0.6	253	3.53±0.6	256	3.55±0.8	252	3.58±0.6	254	3.45±0.6	256	3.32±0.7	241	3.49±0.5
F-test/		108.51**		0.30		94.46**		88.52**		140.89**		26.16**		131.12**		154.29**
Job require rep	etitive or for	ceful hand move	ments etc.													
Yes	179	2.7±0.9	181	3.30±0.6	178	2.86±0.7	180	2.81±0.8	176	2.83±0.8	178	3.17±0.6	178	`2.51±0.7	167	2.87±0.5
No	251	3.59±0.8	251	3.41±0.6	248	3.58±0.6	249	3.57±0.8	247	3.58±0.6	248	3.45±0.6	250	3.34±0.7	239	3.50±0.5
F-test		3.22±0.9**		3.61		127.23**		93.88**		122.90**		24.66**		135.33**		159.52**

^{*}p<0.05 significant, ** p<0.001 highly significant

3.5. Mean scores Quality of Work Life comparison among employees

The average mean score for the seven QoWL dimension among the respondent measured was 3.24 with EEN having the highest mean score while WCS had the lowest mean score. QoWL average scores of 3.24 was measured across the 7 domain. Significant difference were found within the sub-scales used to measure the respondent work commitment and associated impact on their personal lives (p < .001). The result indicated as employees work longer hours performing strenuous farm work that require lifting and moving object about, their QoWL tend to decline (Table 5).

 Table 5. Mean scores QoWL sub-scales perception among respondents.

			•		•	
QoWL Sub-Scales	F/t-test	df	P-Values	Mean Differ- ence	95% Confider ence	nce Interval of the Differ-
					Lower	Upper
CAW	70.221	433	0.001*	3.21	3.1243	3.3043
EEN	115.370	435	0.001*	3.37	3.3111	3.4259
GWB	91.426	429	0.001*	3.28	3.2049	3.3458
HWI	76.932	432	0.001*	3.25	3.1649	3.3309
JCS	85.617	426	0.001*	3.27	3.1901	3.3401
SAW	112.996	429	0.001*	3.33	3.2723	3.3882
WCS	74.336	431	0.001*	2.99	2.9111	3.0692
QoWL	111.836	409	0.000*	3.24	3.1796	3.2934

^{*} Significant, p< .001.

4. Discussion.

To our knowledge this is the first study that have considered QoWL among farm workers in Nigeria as such, outcomes from the study will help improve work life balance among farmers and promote decent work policy implementation. Enhancing farm workers wellbeing is paramount towards the promotion of sustainable farming practice and guarantee food security especially among low and middle-income countries (LMIC) farmers. Salary has been acknowledged as part of the defining factors in the discontent among respondents QoWL. From the study result, it was evident that more than half (60.6%) of the sampled group attest to working above the national working hours of 40 hours per week as specified under the National Minimum Wage Act in other to meet up with their financial target. In addition, 83.7% affirmed to having caring responsibilities towards either their children and or elderly relatives. It can be said that, there is high rate of job burnout among the farm workers especially within the male respondent, the female farm worker were found to have better quality of life above their male counterpart. This finding supported the earlier work that reported women tend to possess stronger emotions and report high level of well-being as compared to men [29]. Accordingly, a recent study elucidated on several factors that include working time, financial stability, and caring responsibilities are among factors that significantly influence farmer worker job satisfaction and their quality of work life [30] to which similar factors was evident among the respondent that took part in the our study. Long working hours and nature of work on the farm are likely factors that influence the work-life balance among the seasonal farmers. Based on the study, such can present inverse relationship between work to family conflict and quality of life among the group. Where the level of work interference on family life increased, there will be a downward level of quality of life. This findings are supported by previous studies where, workplace demand, take home pay, work environment, social engagement were found to have significant impact on self-reporting quality of life among respondent

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[29,31-32]. In addition, Nanjundeswaraswamy and Swamy [23] discoursed personal needs attainment can lead to positive QoWL among employees where organisation rewards employees either in the form of compensation, promotion, recognition and career development that meets their expectation. This outcome was viewed negatively among the participant in their response to "when I have done a good job, it is acknowledge by my line manager" with 52% considering the reward culture within their establishment as not encouraging. Another factor considered as having impact on attainment of QoWL among the participant is the level of work demand and stress faced among the employee just as workers that reported working 25-40 hours per week were found to have high QoWL as compared to those working extra hours. In addition to this, other self-reported factors earlier reported include forgetfulness, sleep disturbance, mental fatigue, stress and anxiety were factors likely to impact on farm workers [29, 33-34].

Safety and health within the work environment, training provision, and social integration are associated with work family life balance. Based on the assessment of the question asked, "the organisation/employer communicates safety issues well with its employees" 69.2% of the respondent, said they do not feel their safety and health is given the needed attention. Considering the farm practice in the country, it is safe to conclude that most farm establishment have inadequate infrastructure in place to support workers wellbeing thereby exposing workers to workplace hazards which is likely to impact on the quality of life. Based on workplace observation during the data gathering, relatively all workers witnessed on farm site tend not to have any form of personal protective equipment and mostly take their break underneath available tree shade on the farm. Outcome from this observation was further corroborated in the working conditions (WCS) domain question where 59.6% of the respondent express their reservation around their working condition while provision of adequate facilities to enable employees to operate efficiently had similar response with 56.4% expressing their dissatisfaction. In addition, 47.6% view their safety and health arrangement at work as inadequate and require further improvement. Considering that most farm workers in Nigeria are employed either on hourly, daily or seasonal basis, the provision of adequate welfare facility and personal protective equipment are things that has frequently not been taken seriously among the operators of these farm enterprise. As earlier reported, job security as well as adequate resource to enable employees perform their job in a safe and efficient manner are factors that can help drive positive QoWL among individuals [23].

From our study, it was evident that family to work schedule affect the QoWL among the respondents. As found in the study, 83.7% of the respondents said they have caring responsibility which indicate individuals tend to draw from their family time in order to fulfil their job demand especially as high number reported to work far above the national working hours. In addition, pressure from work demand and level of stress among the famers is found to be high among the study population. Also, poor working conditions and the need for repetitive lifting and pushing of heavy objects on the farm has been associated with the development of musculoskeletal disorder, problems such as low back pain, joint injuries and repetitive strain injuries is common within the farming sector which could be another factor to impact on the QoWL of the employees[35-36]. These factors are related to both the intrinsic, extrinsic factors associated with the nature of work undertaken, and its frequency to which may be outside the control of each that might influence their state of being. Our findings echo the report by Ramesh and Madhavi [37] where weather, work demand, farm hassles, financial situation, and social interaction were associated with increased stress level among farmer workers observed and financial factors play important factors on stress and wellbeing among their sampled group.

As part of this strive, our study considered associated farm work demand and its impact on workers personal lives. From our findings it is clear that high level of stress is being reported among the sampled group with similar number reported feeling the pressure of the job demand on their personal lives. To add to this, while the role agriculture plays in safeguarding the nation food security, its culture and traditions is evident, there is the need to ensure social sustainability within the sector receives the needed attention

to guarantee farmer workers safety and wellbeing as outcome from the study revealed the gap that exist around the subject. Aside the impact of climate change, farm workers that took part in the study were faced with social and economic challenges now than ever thereby, exerting more pressure on their personal live. The International Labour Organisation (ILO) places emphasis on the need to advance the creation of a "decent work" for every worker (men and women) to obtain decent and productive work in conditions of freedom, equity, security and human dignity that will aid toward advancing health and wellbeing of workers while promoting balance between work and home life [3, 38-39]. Based on this submission, the intervention of QoWL should strive to consider worker participation and involvement in decision making likely to affect them at work.

5. Conclusion

The study analysed the role played by both subjective and behavioural component of QoWL among farm workers in Nigeria as it affect their work life balance. Based on the study's findings job characteristics and its associated factors we found to have influence on QoWL among the respondent using 7 dimensions earlier mentioned. In addition, QoWL differs across gender, age group. Empirical outcomes from the study demonstrates the importance of having the needed balance around job satisfaction, wages, hours and working conditions, wellbeing, work life interface as key factors that can influence workers productivity.

Workers job satisfaction is important element that can lead to high productivity and sustainability of the organisation. To achieve a level of sustainability and food security in LMICs such as Nigeria, there is the need to improve opportunities for greater stability among farm workers. Furthermore, farm workers views on workplace safety and wellbeing provision should be considered in decision making to help understand their occupational expectations. Lastly, large-scale farm operators in Nigeria need to consider putting in place suitable workplace policies that encourage work life balance among their employees. Similarly, oppourtunity should be made where farm workers are able to engage with tailored training initiatives around stress management, work life balance as well as workplace safety, health and wellbeing as a means of boosting their confidence and enhance productivity. In addition to this, the paper holds the potential to serve base for framework development for assessing QoWL within the farming industry in the country and allow further research around impact of job insecurity, within the sector on the nation food security.

Reference

- 1. Hu, H., Zhou, H., Mao, F., Geng, J., Zhang, L. and Zhang, X., 2019. Influencing Factors and Improvement Strategy to the Quality of Nursing Work Life: A Review. *Yangtze Medicine*, 3(4), pp.253-260.
- 2. Kong, F.Z., Zhao, L., Zhang, X.B., Tsai, C.H. and Lin, D.D., 2019. Farmers' Work-Life Quality and Entrepreneurship Will in China. *Frontiers in psychology*, 10, p.787.
- 3. Gosetti, G., 2017. Sustainable agriculture and quality of working life: analytical perspectives and confirmation from research. *Sustainability*, 9(10), p.1749.
- 4. Baksh, K.S., Ganpat, W.G. and Narine, L.K., 2015. Occupational health and safety issues among vegetable farmers in trinidad and the implications for extension. *Journal of agricultural safety and health*, 21(3), pp.159-171.
- Olowogbon, T.S., Yoder, A.M., Fakayode, S.B. and Falola, A.O., 2019. Taming Occupational Stress among Farmers in Developing Nations. In *Effects of Stress on Human Health*. IntechOpen. DOI: 10.5772/intechopen.89898
- 6. Bolarinwa, K.K., Ayinde, A.F.O. and Adeogun, S.O., 2016. Stress coping strategies among agricultural extension agents in Oyo State, Nigeria. *Journal of Agricultural Extension*, 20(1), pp.163-172.

- 7. FAO 2012. Sustainability Assessment of Food and Agriculture Systems Guidelines (test Version 1.1.). Available at: http://www.fao.org/3/ap773e/ap773e.pdf [28/08/2020]
- 8. Chan, K.W. and Wyatt, T.A., 2007. Quality of Work Life: A study of employees in Shanghai, China. *Asia Pacific Business Review*, 13(4), pp.501-517.
- 9. Moda, H.M. and Minhas, A., 2019. Impacts of climate change on outdoor workers and their safety: some research priorities. *International journal of environmental research and public health*, 16(18), p.3458.
- 10. Deary, I.J., Willock, J. and McGregor, M., 1997. Stress in farming. Stress Medicine, 13(2), pp.131-136.
- 11. Hovey, J.D. and Seligman, L.D., 2006. The mental health of agricultural workers. In *Agricultural medicine* (pp. 282-299). Springer, New York, NY.
- 12. Ramesh, A.S. and Madhavi, C., 2009. Occupational stress among farming people. Journal of Agriculture Sciences, 4(3).
- 13. Easton, S. and Van Laar, D., 2013. QoWL (Quality of Working Life): what, how, and why? *Psychology Research*, 3(10), pp.596-605.
- 14. Fontinha, R., Van Laar, D. and Easton, S., 2018. Quality of working life of academics and researchers in the UK: the roles of contract type, tenure and university ranking. *Studies in Higher Education*, 43(4), pp.786-806.
- 15. Elkington, J., 1999. Triple bottom line revolution: reporting for the third millennium. Australian CPA, 69(11), pp.75-76.
- 16. Abrey, M. and Smallwood, J.J., 2014. The effects of unsatisfactory working conditions on productivity in the construction industry. *Procedia Engineering*, 85(2014), pp.3-9.
- 17. Denvir, A., Hillage, J., Cox, A., Sinclair, A. and Pearmain, D., 2008. Quality of Working Life in the UK. *Institute for Employment Studies*.
- 18. Aletraris, L., 2010. How satisfied are they and why? A study of job satisfaction, job rewards, gender and temporary agency workers in Australia. *Human Relations*, 63(8), pp.1129-1155.
- 19. Eaves, S., Gyi, D.E. and Gibb, A.G., 2016. Building healthy construction workers: Their views on health, wellbeing and better workplace design. *Applied ergonomics*, 54, pp.10-18.
- 20. Gospel, H., 2003. Quality of working life: A review on changes in work organization, conditions of employment and work-life arrangements. International Labour Office.
- 21. Sirgy, M.J., Efraty, D., Siegel, P. and Lee, D.J., 2001. A new measure of Quality of Work Life (QWL) based on need satisfaction and spillover theories. *Social indicators research*, 55(3), pp.241-302.
- 22. Huang, H., Zhang, H., Xie, Y., Wang, S.B., Cui, H., Li, L., Shao, H. and Geng, Q., 2020. Effect of Balint group training on burnout and Quality of Work Life among intensive care nurses: A randomized controlled trial. *Neurology, Psychiatry and Brain Research*, 35, pp.16-21.
- 23. Nanjundeswaraswamy, T.S. and Swamy, D.R., 2013. Review of Literature on Quality of Work Life. *International Journal for Quality Research*, 7(2), pp.201-214.
- 24. Requena, F., 2003. Social capital, satisfaction and quality of life in the workplace. Social indicators research, 61(3), pp.331-360.
- 25. Van Laar, D., Edwards, J.A. and Easton, S., 2007. The Work-Related Quality of Life scale for healthcare workers. *Journal of advanced nursing*, 60(3), pp.325-333.
- 26. Vagharseyyedin, S.A., Vanaki, Z. and Mohammadi, E., 2011. Quality of Work Life: Experiences of Iranian nurses. *Nursing & health sciences*, 13(1), pp.65-75.
- 27. Easton, S. and Van Laar, D., 2018. *User manual for the Work-Related Quality of Life (WRQoL) Scale: a measure of quality of working life.* University of Portsmouth.

- 28. Tavakol, M. and Dennick, R., 2011. Making sense of Cronbach's alpha. International journal of medical education, 2, p.53.
- 29. Windon, S.R., Jepsen, S.D. and Scheer, S.D., 2014. Identifying the factors affecting Ohio farmers quality of life. *Journal of the NACAA*, 7(2), pp.1-7.
- 30. Herrera, B., Gerster-Bentaya, M. and Knierim, A., 2018. Farm-level factors influencing farmers satisfaction with their work. Paper presented at: 30th international Conference of Agricultural Economist. Vancouver, July 28-August, 2018.
- 31. Kang, L.S. and Deepak, 2014. Work-family conflict & Quality of Work Life among veterinary doctors. *The Indian Journal of Industrial Relations*, pp.707-721.
- 32. Wojewódzka-Wiewiórska, A., Kłoczko-Gajewska, A. and Sulewski, P., 2020. Between the Social and Economic Dimensions of Sustainability in Rural Areas—In Search of Farmers' Quality of Life. *Sustainability*, 12(1), p.148.
- 33. Daghagh Yazd, S., Wheeler, S.A. and Zuo, A., 2019. Key risk factors affecting farmers' mental health: A systematic review. *International journal of environmental research and public health*, 16(23), p.4849.
- 34. Sato, M., Kato, H., Noguchi, M., Ono, H. and Kobayashi, K., 2020. Gender differences in depressive symptoms and work environment factors among dairy farmers in Japan. *International journal of environmental research and public health*, 17(7), p.2569.
- 35. Osborne, A., Blake, C., Fullen, B.M., Meredith, D., Phelan, J., McNamara, J. and Cunningham, C., 2012. Prevalence of musculoskeletal disorders among farmers: a systematic review. *American journal of industrial medicine*, 55(2), pp.143-158.
- 36. Mbada, C.E., Adeyemi, T.L., Adedoyin, R.A., Badmus, H.D., Awotidebe, T.O., Arije, O.O. and Omotosho, O.S., 2015. Prevalence and modes of complementary and alternative medicine use among peasant farmers with musculoskeletal pain in a rural community in South-Western Nigeria. *BMC complementary and alternative medicine*, 15(1), p.164.
- 37. Ramesh, A.S. and Madhavi, C., 2009. Occupational stress among farming people. Journal of Agriculture Sciences, 4(3).
- 38. Gaviglio, A., Bertocchi, M., Marescotti, M.E., Demartini, E. and Pirani, A., 2016. The social pillar of sustainability: a quantitative approach at the farm level. *Agricultural and Food Economics*, 4(1), p.15.
- 39. ILO (International Labour Organization) 19999. Decent Work: Report of the Director-General, International Labour Conference; ILO: Geneva, Switzerland. Available at: https://www.ilo.org/public/english/standards/relm/ilc/ilc87/rep-i.htm#1.%20The%20primary%20goal [07/12/2020]