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Working in Solidarity Promotes Work Engagement through Work-Related Self-Efficacy

Lebbaeus Asamani[1], Eugene Yaw Milledzi[2], Georgina Nyantekyiwaa Boampong[3], Miriam Danso-Mensah[4], Daniel Yeboah Mensah[5], Kweku Arhin[6], Victoria Naamwanuru[7]

ABSTRACT

Interpersonal solidarity among members is an important element for the success and smooth operation of any work organisation. However, there is a dearth of research connecting interpersonal solidarity to work-related self-efficacy, and engagement at work. The present study investigated occupational self-efficacy as an intervening mechanism through which interpersonal solidarity could influence work engagement of 179 administrative staff of public universities in Southern Ghana in a cross-sectional survey. The data were analysed with the Hayes Process model for SPSS. The results indicated that interpersonal solidarity predicted both occupational self-efficacy and work engagement. The relationship between interpersonal solidarity and occupational self-efficacy was stronger than that between interpersonal solidarity and work engagement. Finally, occupational self-efficacy significantly mediated the relationship between interpersonal solidarity and work engagement. The paper concluded that interpersonal solidarity and occupational self-efficacy are important elements in individuals' work engagement. Also, the paper demonstrates the relevance of occupational self-efficacy as a mechanism through which interpersonal solidarity could influence engagement at work. The findings were discussed in the light of the job-demand resource model and the social cognitive theory, and recommendations were proffered for practice and further research.

Keywords: Occupational self-efficacy, interpersonal solidarity at work, engagement at work, interpersonal relationship, the community at work, university administrative staff.
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1. Introduction

[1] University of Cape Coast, Ghana. Email: lebbaeus.asamani@ucc.edu.gh
[2] Department of Education and Psychology, University of Cape Coast, Ghana. Email: emilledzi@ucc.edu.gh
[3] Oil and Gas Institute, University of Cape Coast, Ghana. Email: georgina.thompson@ucc.edu.gh
[4] School of Economics, University of Cape Coast, Email: miriam.dansomensah@ucc.edu.gh
[5] Office of the Vice Chancellor, Monitoring and Evaluation Unit, University of Cape Coast, Ghana. Email: daniel.mensah@ucc.edu.gh,
[6] Faculty of Educational Foundations, University of Cape Coast, Ghana. Email: kweku.arhin@ucc.edu.gh
[7] Department of Water and Sanitation, University of Cape Coast, Ghana. Email: victoria.naamwanuru@ucc.edu.gh

The study of work in the context of formal organisations and its related facets and variables such as occupational self-efficacy, interpersonal solidarity and work engagement among employees has gained prominence among industrial and organisational psychologists as well as sociologists worldwide (Dollad & Winefield, 2010). This is because in the views of functionalists' sociologists, for example, work determines the boundaries of human experiences and it defines human livelihood. Many of the experiences that individuals acquire are obtained from the work they do (Schneider, 2008). People adapt their work roles as part of their self-identity and carry them forward into their life. Work, therefore, is part of the process of socialisation in that, the function of work is to provide status, income and identity to individuals (Cole, 2004). Given the psychosocial and economic value of work in the lives of individuals, organisations expect their workforce to be forthcoming and immersed in their work to ensure organisations goals are achieved. When organisational objectives and targets are achieved, employees also derive their personal, psychosocial and economic benefit, leading to a more satisfying quality of work life.

The degree to which employees persist and are involved in their work regardless of the challenges they face, and the length of time and amount of effort that they devote to their work represents their level of work engagement. Bakker et al (2008) conceptualised work engagement as a three-dimensional construct that consists of vigour, dedication, and absorption. Vigour represents an exhibition of high levels of energy and psychological resilience at working, and a demonstration of a readiness to put in the effort for task accomplishment and to persevere when facing difficulties on the job. The dedication dimension denotes the expression of willingness to be immersed, enthusiastic and expression of inspiration, and pride in one's work. The final dimension, absorption is characterised by a state of devotion, concentration and being happily engrossed in the discharge of work duties. Work engagement, therefore, constitutes primarily, a psychological state, and may be related to certain characteristics of individual, organisational and contextual variables.

Similarly, Schaufeli and Bakker (2010) posit that work engagement is a positive, fulfilling and work-related state of mind which is characterised by persistence, vigour and immersion in one's work, irrespective of the difficulties that come in the line of duty. Schaufeli and Bakker noted that engaged workers demonstrate commitment, are gladly absorbed, show enthusiasm and high activity level in their work. They are self-starting, proactive, they create their positive feedback, in terms of personal motivation, recognition, and appreciation, and are motivated by an irresistible inner drive to work hard to attain success (Gorgievski et al., 2010). We adopted the conceptualisation of work engagement by Bakker and colleagues in this paper.

Several types of research explored factors that could promote work engagement in various settings. Coetzer and Rothmann (2007) examined the relationships between job demands, jobs resources, and work engagement. They reported a significant positive relationship between job resources such as organisational support, social support, growth opportunities, and advancement opportunities and work engagement. This result is consistent with other studies showing significant relationships between job resources and work engagement. For example, Bakker et al. (2008) explore the link between work engagement and performance and conclude that, unlike workaholism, work engagement is significantly positively related to in-role performance. This implies that there is an improvement in task performance when employees are actively engaged in their work. Similarly, Roux (2010) in a study using authentic leadership, optimism, and self-efficacy as predictors; and work engagement as the criterion conclude that all the independent variables contribute significantly to predict work engagement. The present paper focused on how interpersonal solidarity as an organisational resource and occupational self-efficacy (personal resource) contribute to the work engagement of administrative staff of public universities in Southern Ghana.

1.1 Statement of the problem

The significance of work engagement to the individual, as well as the overall corporate organisation cannot be overemphasised. This, therefore, makes it imperative for research efforts to be directed at finding out various individual, organisational and contextual factors that could promote engagement in various work settings. However, extant literature suggests that there is a dearth of empirical research connecting interpersonal solidarity at work and occupational self-efficacy to work

engagement, globally, and specifically, in the Ghanaian context. Baker and Lee (2020) and several others (e.g. Purcell, 2014; Goddard, 2014; Truss, 2014) observed that despite pertinent literature explicitly indicating that solidarity is an essential element of healthy community ethos and behaviour, there is a paucity of research on solidarity about workplace behaviour and work outcomes, such as work engagement. Similarly, Banting and Kymlicka (2017, p. 5) observed a "curious absence of solidarity as a subject of research…" in social science and the work context.

A critical review of the literature further suggests that most of the related studies investigated the relationships between the generalised self-efficacy (not occupational self-efficacy) and other organisational variables (e.g. Chan et al., 2017; Chimote & Srivastava, 2013; Peng & Mao, 2015). There is little empirical evidence concerning interpersonal relationships, work engagement and self-efficacy in developing countries (e.g. Chaudhary et al., 2013) like Ghana. There was also no study found that investigated the role of occupational self-efficacy in the relationship between workplace interpersonal solidarity and work engagement.

Research connecting interpersonal solidarity to self-efficacy in the work context and work engagement in the Ghanaian context would be a valuable contribution to the literature, given the dearth of research in the African context. African societies are known to ascribe to communal living, and it would be important to find out the level of solidarity and how it relates to workplace self-efficacy and engagement in the Ghanaian context. The present paper, therefore, investigated interpersonal solidarity (organisational or contextual resource) and occupational self-efficacy (personal-psychological resource) as potential antecedents of work engagement. The present paper argues that the generalised self-efficacy might relate differently with workplace variables; occupational self-efficacy is specific to the work context and would be more appropriate in investigations regarding potential antecedents of work outcomes, such as work engagement than the generalised self-efficacy. We further investigated the mediating role of occupational self-efficacy in the relationship between interpersonal solidarity and work engagement to explain how workplace solidarity may relate to employee work engagement.

1.2 Interpersonal solidarity

Solidarity is considered as one of the core principles of a "global ethic" and among the norms found in "…all spiritual and secular traditions of humanity" (Dierksmeier, 2016, p. 24). Interpersonal solidarity represents a psychological and social closeness between persons generated through trust and self-disclosure and constitutes a feeling of closeness between people that develops as a result of shared sentiments, similarities, and intimate behaviours. Conceptually, people with strong solidarity feelings also trust, like, and self-disclose to one another (Schaufeli, & Salanova, 2007).

John Paul II (as cited in Baker & Lee, 2020) describes solidarity as a firm and persevering determination to commit oneself, the collaboration and sharing in a community of work, and the cooperation of many people in working towards a common goal or common good. Solidarity at the workplace represents a sense of belonging to a particular work community (Simms, 2012). Indeed, McMillan and Chavis (1986) intimated that interpersonal solidarity aligns with the theory of sense of community, which has been studied in the context of business and the workplace. The concept of a sense of community consists of a sense of membership, influence and trust, integration of members' needs and values, and shared emotional connection to the community (McMillan, 2011). Schaufeli and Bakker (2004) also suggest solidarity is well-aligned with the conception of social support from co-workers and superiors. Thus, interpersonal solidarity represents a psychological sense of community and social support from colleagues and superiors at work.

Solidarity is a critical social and cultural norm in any society and human institution because it is considered to be a core social value that mediates between the individual and the community (Scholz, 2008). This is a fundamental social value for individuals and work communities. Work-related considerations of social community often adopt the notion of social solidarity, rather than civic solidarity in welfare states that relates citizens and state by ensuring that citizens' basic needs are met (Strauß & Fleischmann, 2020). The workplace is considered a social entity and aptly described (workplace) by Sandelands (2017, 771) as "a joyful solidarity of persons for the common good". Workplace solidarity, therefore, represents interpersonal relationships evolving from human dignity that produces conducive and cohesive social community for shared social and economic good. It represents virtuous social

behaviour, including individual freedom and responsibility, civic friendship, benevolence, reciprocity, and cooperation (Baker & Lee, 2020). Solidarity is viewed as a concept that comprises two complementary aspects, a social principle, and a moral virtue (Reyes et al., 2021). Interpersonal solidarity should therefore be conceived primarily in its value as a moral virtue that holds social and works for organisations together with implications for work outcomes and experiences.

1.3 Occupational self-efficacy

Occupational self-efficacy is operationalised as the perceptions of individuals about their abilities to effectively perform work tasks assigned to them. It represents how competent a person feels concerning his or her ability to successfully fulfil and perform the tasks in his or her job (Rigotti et al., 2008). Occupational self-efficacy, therefore, reflects the conviction of a person that he/she can execute behaviours relevant to their work. This concept represents self-efficacy in the work context and involves the belief that the individual has the capabilities to perform at a certain level to achieve certain goals or manage prospective situations at work. This belief influences event that surrounds the individual's work-life in the organisation. Again, it influences the amount of time, energy and effort that an individual invests in executing a particular task which impacts the individual's thoughts, actions, as well as emotions.

Self-efficacy is a critical component of goal realisation in Bandura's social cognitive theory (Chaudhary et al., 2013; Redmond, 2010). The social cognitive theory posits that self-efficacy affects the choice of activities an individual might attend, the effort he or she puts into his or her work, the depth of his or her task involvement, and the length of time he or she might endure when the individual faces difficulties or challenges at the workplace. In line with this view, occupational self-efficacy represents a key personal resource that can promote the work engagement of employees.

1.4 Occupational self-efficacy and work engagement

Job resources are the most important predictors of job engagement, according to the Job Demand-Resource (JD-R) model (Bakker & Demerouti, 2007). Following this, Xanthopoulou et al. (2007) introduced the idea of personal psychological capital into the JD-R model. The personal psychological capital resources include self-efficacy, hope, optimism and self-esteem). These personal resources could affect one's engagement at work beyond the impact of employment and organisational resources. In a series of diary studies, Xanthopoulou and others emphasised the significance of various personal resources that promote individuals' work engagement.

Schwarzer and Hallum (2008) report that individuals with high self-efficacy tend to exhibit greater self-esteem and confidence in their abilities to make an effort to achieve organisational goals even when they encounter setbacks. Bringing this to the work context, individuals who score high on occupational self-efficacy may be less likely to be affected by the adverse effects of stress and remain committed to their work. We, therefore, expect a positive relationship between occupational self-efficacy and work engagement. Extant literature indicates that self-efficacy has a positive relationship with professional performance, skills development, work engagement, as well as positive attitudes toward the organisation (e.g. Del Líbano et al., 2012; Salanova et al., 2011). Similarly, researchers such as Chimote and Srivastava (2013), and Peng and Mao (2015) opined that with persistence, higher self-efficacy leads to the attainment of positive outcomes, and this generates higher intrinsic work satisfaction and greater work commitment and engagement among employees.

Other researchers report divergent findings. For instance, Consiglio et al. (2013) found a negative relationship between self-efficacy and job satisfaction, which is a negative work outcome, and less satisfaction may engender less engagement. Similarly, König et al., (2010) reported no significant relationship between occupational self-efficacy and job performance. Also, Chan et al., (2017) examined the extent to which self-efficacy influences employees' thought patterns, and emotional reactions, which in turn enable them to cope with work and family demands, and ultimately achieve work-life balance and work engagement. They report a significantly negative relationship between self-efficacy and work-life balance.

Pati and Kumar (2010) found a significant positive relationship between self-efficacy and work engagement in a study among Indian software programmers. Having the belief that one is capable of

discharging work duties enables a worker to get immersed in the task as well as expending higher energy levels and commitment to complete a task (Sweetman & Luthans, 2010). Self-efficacy could function in the cognitive interaction phase (Breso et al., 2011), and self-related concerns associated with low self-efficacy, could interfere with the commitment process and make workers more vulnerable to environmental distractions; hence workers who scored low on self-rated self-efficacy have been found to find it difficult getting integrated into the work context and engaging in their work (Breso et al., 2011; Gonzalez-Roma et al., 2006). Low self-efficacy could also lead to depletion of personal resources, leading to burnout (Cherniss, 1993), hence low engagement. This is consistent with the social cognition theory (Bandura et al., 1999), which asserts that personal effectiveness perceptions can decide the choices that people make and their goals.

Furthermore, Albert Bandura's social cognitive theory provides the theoretical context and grounding for linking occupational self-efficacy with work engagement. The social cognitive theory suggests that efficacy beliefs are the basis of human agency, which influences one's motivation to engage in specific positive behaviours related to high performance. Self-efficacy therefore can influence how one thinks, feels and acts in various contexts, including the workplace. Bandura notes that one's self-assessment of his/her level of competence regarding a given task could determine the length of time and amount of energy and effort that he/she might invest in a task (Bandura et al., 1999).

1.5 Interpersonal solidarity and work engagement

Devaney and Chen (2003) indicate that positive interpersonal solidarity with co-workers is an important antecedent of workers' job satisfaction and work engagement. John Paul II (as quoted in Baker & Lee, 2020, para. 2) emphasised the value of solidarity in the workplace:

The purpose of the business firm is not simply to make a profit but is to be found in its very existence as a community of persons who in various ways are endeavouring to satisfy their basic needs and to form a particular group at the service of the whole of society.

Bakar and Lee (2020) made three propositions regarding interpersonal solidarity. The first is that solidarity hinges on trust and it eliminates relational obstacles that encourage individuals to be willing to risk vulnerability, hope for mutual commitment, and build community. Second, the embodied strength of a sense of community at work should reinforce meaning and shared commitment to the community and the work. The third proposition is that the sense of meaning and the experience of mutual social support should naturally contribute to feelings of energy, inspiration and fulfilment at work. Based on these three propositions, they postulated a positive relationship between interpersonal solidarity and work engagement, and we uphold the same proposition in the present study.

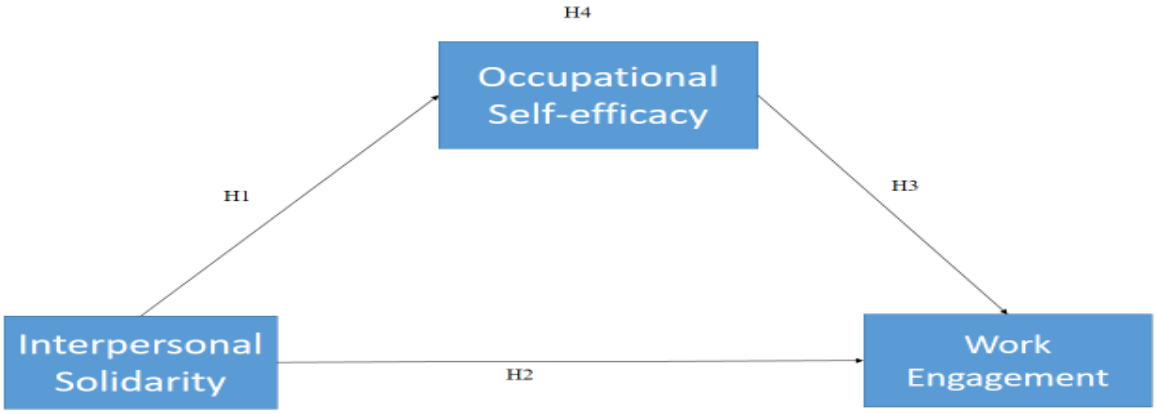
Having a supportive and cooperative co-worker is a modest source of job satisfaction. Ducharme and Martin (2000) concluded that effective co-worker support at the workplace significantly enhances the commitment and satisfaction levels of workers. Similarly, Saba (2011) argues positive interpersonal relationship among co-workers makes them committed and actively engaged in their work. From the foregoing, the impression is that, for most employees, work fulfils the need for social interaction. Therefore, having friendly and supportive co-workers encourages commitment and engagement at work, as Bakker et al. (2008) observed that interdependence enhances commitment through the production of mutual effectiveness and advanced performance to achieve team target or group achievement. Workplace friends are in many ways expressed as an asset, as friends associated with the workplace provide their colleagues with social support that is perceived as a personal resource associated with increased engagement (Schnorpfeil et al., 2002). Friendly relationships with colleagues can make individuals feel more comfortable and reveal themselves at work (Kahn, 1990). Also, workers who are happy with their working relationships tend to be happier with their job, which leads to more dedication to their work (Ducbarme & Martin, 2000).

1.6 Interpersonal solidarity and occupational self-efficacy

A good workgroup serves as a source of support, and the better the workplace interpersonal relationships, the better-informed employees are about issues and the more committed and satisfied they are with their jobs (Milledzi et al., 2018). Skaalvik and Skaalvik (2019) found a positive relationship

between teachers' self-efficacy and feeling of belonging, and teacher engagement in their work environment.

In a study conducted among Netherlands employees, personal resources (self-efficacy, organisational self-esteem and optimism), they concluded that job opportunities contribute to personal resource growth, which in turn, strengthens work engagement (Xanthopoulou et al., 2008; Xanthopoulou et al., 2009a; 2009b). The present study, therefore, considers interpersonal solidarity among co-workers as an organisational or job resource, which was expected to positively relate to occupational self-efficacy, which in turn would strengthen work engagement. Thus, occupational self-



efficacy was modelled as a mediating mechanism between interpersonal solidarity and work engagement.

Specifically, the paper investigated the levels of interpersonal solidarity, occupational self-efficacy and work engagement of administrative staff of three traditional public universities in Southern Ghana, and tested the following hypotheses, as depicted in the conceptual framework (Fig.1).

1. Interpersonal solidarity will significantly predict occupational self-efficacy
2. Interpersonal solidarity will significantly predict work engagement
3. Occupational self-efficacy will significantly predict work engagement
4. Occupational self-efficacy will significantly mediate the relationship between interpersonal solidarity and work engagement.

2. Methodology

2.1 Sample and sampling procedures

The study was a cross-sectional survey involving a sample of 179 (107 males and 72 females) administrative staff of three major universities in Southern Ghana, obtained through consecutive sampling. The consecutive sampling procedure was used because the data was collected during the outbreak of the COVID 19 pandemic, and random sampling was practically not feasible. The G-Power a-priori sample size determination was used to estimate the adequate sample for the study. The analytical approach involved linear multiple regression, fixed model, R2 deviation from zero. With two predictors, an expected effect size of .35, the error probability of .05, and the expected power of .95, the G-Power estimated a minimum sample size of 48 respondents. Therefore, our sample size of 179 was considered adequate for the study.

Given that there was no intention of comparing results from the different sampling units, there

Figure 1. Conceptual Framework.

was no effort to get a representative sample from each of the universities. The focus was rather on getting an adequate sample to enable us to draw meaningful conclusions regarding the relationships investigated. Most of the respondents were between the ages of 31-40 years, with only a few above 40 years.

Table 1.

Age distribution of respondents.

Age range (years)	Frequency	Percent
18-25	51	28.5

26-30	34	19.0
31-40	75	41.9
41years and above	19	10.6
Total	179	100.0

2.2 Research instruments

2.2.1 Interpersonal solidarity

The 20-item interpersonal solidarity scale (Wheeless, 1978) was used in the present study. The scale appears to be unidimensional and reliable. Responses are rated on a 7 -point Likert-type scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Composite scores on the scale range from 20 to 140, with higher scores representing better interpersonal solidarity. The interpersonal solidarity scale appears internally consistent with split-half reliability of .96 (Wheeless, 1978). In the present study, the reliability was estimated using Cronbach's alpha, and .80 was obtained.

2.2.2 Occupational self-efficacy

The short version of the occupational self-efficacy scale (Rigotti et al, 2008) consisting of eight items, which was further reduced to six items, based on prior scale and item analyses of German sample was used in the present study. The scale is unidimensional, and the items were rated on a 7-point scale ranging from 1 (strongly disagree) to 7(strongly agree). The composite scores for individual ranges from 6 to 42, and higher values reflect a higher level of occupational self-efficacy. The scale has reported internal consistency of Cronbach's alpha of .79 and above (e.g. Rigotti et al., 2008), and for the current sample, the alpha coefficient was .91.

2.2.3 Work engagement

The 13-item Utrecht Work Engagement Scale (UWES: Schaufeli et al., 2006), consisting of three dimensions: vigour, dedication, and absorption, was used for this study. The vigour dimension consists of the first six items that measure a respondent's reported levels of energy and resilience, the willingness to invest effort, not being easily fatigued, and persistence in the face of difficulties at work. The second dimension, dedication, consists of four items that measure the extent to which a worker derives a sense of significance from his/her work, including feeling enthusiastic and proud about the job, and feeling inspired and challenged by it. The absorption dimension consists of three items that assess the feeling of a worker of being totally and happily immersed in work and having difficulties detaching from it, and time seems to pass quickly, with the worker forgetting everything around as he/she is immersed in the work. Responses were rated on a 7-point Likert type of scale, ranging from strongly disagree (1) to strongly agree (7). The composite score for the overall scale ranges from 13 to 91, with higher scores denoting better work engagement. The scale has good psychometric properties with reported reliability coefficients of .84, .79 and .89 for vigour, dedication and absorption respectively (Schaufeli et al., 2006). For the current study, the alpha coefficient for the overall scale was .86, while those for the dimensions were .68, .81, and .73 for vigour, dedication and absorption respectively.

Criterion values for the three scales for low, moderate and high scores are presented in Table 2. Thus, a mean score of 19.80 on occupational self-efficacy, for example, indicates a moderate level, while a mean of 75.67 on the work engagement measure, for example, indicates a high level of engagement at work.

Table 2.

Criterion values of the scales for low, moderate and high scores.

Scale	Low	Moderate	High
Inter. Solidarity	20-59	60-99	100-140
Self-Efficacy	6-17	18-29	30-42
Work Engagement	13-38	39-64	65-91

3. Results

The study sought to investigate how interpersonal solidarity relates to work engagement, through occupational self-efficacy of the administrative staff of public universities in Southern Ghana.

The levels of their interpersonal solidarity, occupational self-efficacy and work engagement were assessed using the mean scores. The Hayes PROCESS procedure for SPSS Version 3.4 for mediation analysis was used to test the extent to which interpersonal solidarity and occupational self-efficacy predict work engagement, and to test the mediating role of occupational self-efficacy. The results are presented and discussed accordingly, in the light of the social cognitive theory, Job-Demand-Resource model and the sense of community theory.

3.1 Levels of interpersonal solidarity, occupational self-efficacy and work engagement of public university administrative staff in Southern Ghana

Table 3.

Descriptive statistics of variables.

Variables	Range	Mean	SD	Remarks
Interpersonal solidarity	20-140	81.18	14.70	Moderate
Occupational self-efficacy	6-42	33.22	6.92	High
Work engagement	13-91	68.29	12.13	High

The mean values in Table 3, compared with the criterion values in Table 2, showed that the administrative staff of the public universities in Southern Ghana reported a moderate level of interpersonal solidarity (81.18 is in the moderate range of 60-99), with high levels of occupational self-efficacy and work engagement.

3.2 Test of hypotheses

Relevant assumptions for the use of the linear multiple regression analytical approach were tested. All variables were measured on the interval scale of measurement, and there was no issue of multi-collinearity among the variable. Test of normality, however, showed that the distribution of the scores on all three main variables was not normal. Consequently, the Hayes PROCESS Procedure, which is a soft modelling analytical approach and uses bootstrapping technique, was used to run the analyses to test all the hypotheses. The basic mediation model (Model 4) was used for the analysis. Five thousand bootstrapping samples, with bias-corrected and accelerated at a 95% level of confidence was used for all analyses. The standardised beta coefficients (β) were reported.

H1: Interpersonal solidarity will significantly predict occupational self-efficacy

The results showed that interpersonal solidarity significantly predicted occupational self-efficacy, $\beta = .337$, $p < .001$, [.008, .211], and accounted for 11.4% of the variance in occupational self-efficacy. The positive relationship suggests that better interpersonal solidarity is related to a higher feeling of self-efficacy on the job.

H2: Interpersonal solidarity will significantly predict work engagement

H3: Occupational self-efficacy will significantly predict work engagement

The linear multiple regression was used to test the two hypotheses. The results showed that both interpersonal solidarity, $\beta = .119$, $p = .014$, [CI: .019, .164], and occupational self-efficacy, $\beta = .751$, $p < .001$, [CI: 1.135, 1.463] significantly predicted work engagement, with occupational self-efficacy being a better predictor. The two predictors accounted for 63.8% of the variance in employee work engagement.

Table 4.

Multiple linear regression of work engagement on interpersonal solidarity and occupational self-efficacy (OSEFF)

Effect	Unstand B	SE	T	P	LLCI	ULCI	B
Constant	17.524	3.379	5.185	.000	10.855	24.193	-
Solidarity	.091	.037	2.479	.014	.019	.164	.199
OSEFF	1.299	.083	15.641	.000	1.135	1.463	.751

$R = .799$; $R2 = .638$; $F(2, 177) = 156.229$; $p < .001$

Further analysis of multivariate multiple linear regression (Table 5) of how interpersonal solidarity and occupational self-efficacy relate to the dimensions of work engagement was conducted. The results showed that interpersonal solidarity significantly predicted only the vigour dimension of work

engagement. Thus, positive interpersonal solidarity is relevant for enhancing the extent to which employees exert energy in the performance of their duties. Occupational self-efficacy predicted all three dimensions of work engagement. Thus, both predictors significantly predicted vigour, with occupational self-efficacy being a stronger predictor, but only self-efficacy predicted dedication and absorption.

Table 5.
Multivariate multiple linear regression of dimensions of work engagement on interpersonal solidarity and occupational self-efficacy.

Dependent Variable	Parameter	B	Std. Error	T	Sig.	95% Confidence Interval		Partial Eta Squared
						Lower Bound	Upper Bound	
Vigour[a]	Intercept	6.738	1.706	3.950	.000	3.372	10.104	.081
	Solidarity	.091	.018	4.945	.000	.055	.128	.122
	OSEFF	.509	.042	12.077	.000	.426	.593	.453
Dedication[b]	Intercept	8.609	1.480	5.819	.000	5.689	11.530	.161
	Solidarity	-.025	.016	-1.574	.117	-.057	.006	.014
	OSEFF	.470	.037	12.841	.000	.398	.542	.484
Absorption[c]	Intercept	2.226	1.497	1.487	.139	-.729	5.182	.012
	Solidarity	.025	.016	1.554	.122	-.007	.057	.014
	OSEFF	.318	.037	8.595	.000	.245	.391	.296

a. R Squared = .575 (Adjusted R Squared = .570)
b. b. R Squared = .497 (Adjusted R Squared = .491)
c. c. R Squared = .354 (Adjusted R Squared = .347)

H4: Occupational self-efficacy will significantly mediate the relationship between occupational self-efficacy and work engagement

The mediation regression analysis summary showed that the model was good, R = .372, p <.001. The total effect (relationship) of interpersonal solidarity on work engagement was significant, b = .285, β = .372, p < .001, [CI: .180, .390], and accounted for 13.9% of the variance in work engagement. Both the direct effect, b = .091, β = .119, p = .014, [CI: .019, 164], and indirect effect effects, b = .194, [CI: .067, .331]; β = .253, [CI: .099, .399], were significant. Given that both the direct and indirect effects of interpersonal solidarity on work engagement were significant and positively related, we concluded that occupational self-efficacy played a significant complimentary partial mediating role in the relationship between interpersonal solidarity and work engagement.

Table 6.
Direct, indirect and total effects of interpersonal solidarity on work engagement, through occupational self-efficacy.

Effect	Unstand	SE	T	P	LLCI	ULCI	Ps	Cs
Direct	.091	.037	2.479	.014	.019	.164	.008	.119
Indirect	.194	.067	-	-	.069	.331	.017	.253
Total	.285	.053	5.350	.000	.180	.390	.025	.372

4. Discussion of findings

The main purpose of the study was to investigate the influence of interpersonal solidarity on work engagement, through occupational self-efficacy of the administrative staff of public universities in Southern Ghana. The levels of the workers' interpersonal solidarity, occupational self-efficacy and worker engagement among the workers were also assessed.

The results provided support for all the four hypotheses: interpersonal solidarity positively predicted both occupational self-efficacy and work engagement; occupational self-efficacy positively predicted work engagement, which means that both interpersonal solidarity and occupational self-efficacy positively predicted work engagement. The results showed further that when interpersonal solidarity and occupational self-efficacy were in the equation together, occupational self-efficacy was a stronger predictor than interpersonal solidarity. Another important finding was that interpersonal solidarity had a stronger relationship with occupational self-efficacy than it had with work engagement. Finally, occupational self-efficacy played a complementary partial mediating role in the relationship between solidarity and work engagement. The findings are discussed in the light of the Social Cognitive Theory, sense of community theory, and the Job Demand-Resource model within the Ghanaian work context.

4.1 Levels of work engagement, interpersonal solidarity and occupational self-efficacy

The level of interpersonal solidarity among the administrative staff of the public universities was found to be moderate, with high levels of occupational self-efficacy and work engagement. The moderate level of interpersonal solidarity shows that there is a relatively good interpersonal relationship among the workers, characterised by interpersonal trust, liking and disclosures to one another, coupled with a feeling of moderate level of closeness among them.

As indicated by McMillan and Chavis (1986) interpersonal solidarity align with the theory of sense of community and has implications for the context of work. Sense of community at work is important for psychological safety and social connectedness, as these would make individuals at work feel complete as humans. Individuals do not only go to work or continue to be members of a work organisation because of economic reasons. There are social and psychological benefits that individuals derive from being a member of a work community. Indeed, African societies, including Ghana are generally known traditionally, to be communal and collectivist. This is characterised by a strong feeling of a sense of community, interpersonal solidarity, care for others, a feeling of belonging, among members. MacDonald et al. (2019) consider solidarity as a vital element in team dynamics. The work duties of administrative staff in the universities thrive on collaboration and cooperation, and in workplaces where coworkers are mutually dependent on each other, such as in the context of university administration, interpersonal solidarity is expected to be high (Koster et al., 2007). However, there seems to be some evidence that the traditional communal or sense of community and collectivism feelings in the African context are dwindling, and the feeling of trust and cooperation among individuals seem to be eroding in quite current times (Dutton & Heaphy, 2003). The sense of self-centeredness, greed and egoism has been found to have increased, while the feeling of care for others, togetherness and collaboration with others have rather decreased (Gull & Doh, 2004; Schroth & Elliot, 2002). This could explain why the level of solidarity was seen to be moderate among the administrative staff, rather than high as expected.

Meanwhile, the moderate level of solidarity is encouraging, as interpersonal solidarity creates a conducive environment for workers and promotes cooperation and teamwork among them. This, therefore, means that a dwindling level of solidarity could be a course of worry at the workplace.

Regarding the high level of occupational self-efficacy observed in this study, it generally suggests that the workers had a high positive belief in their ability to perform their tasks at the workplace. This might be because rigorous and stringent recruitment and selection processes are used to get individuals who are qualified before hiring in job roles in the public universities in Ghana. Also, there are orientation programmes, continuous in-service training, and continuous professional development programmes for staff in the universities. The high level of reported work-related self-efficacy is relevant and a good sign, as it plays an influential role in determining individual initiatives, level of effort and perseverance on the job (Chen et al., 2004). It is therefore not surprising that the results also showed that the level of reported work engagement was high.

The high level of work engagement suggests that the administrative staff exhibit an appreciable level of enthusiasm, energy and dedication to their job duties. Bakker et al. (2008) reported that contemporary organisations need employees, who are psychologically linked to their work and who are willing and able to invest in their roles. Highly engaged employees are willing to go the extra mile to get the job done creatively and proactively. They demonstrate a positive work attitude and are committed

to high-quality standards of performance. This is a positive sign for the universities, which means the universities are doing something right.

4.2 Interpersonal solidarity, occupational self-efficacy and work engagement

The first research hypothesis tested the relationship between interpersonal solidarity and occupational self-efficacy. The findings indicate that interpersonal solidarity is positively related to occupational self-efficacy of the administrative staff of the public universities. This suggests that when there is a positive interpersonal relationship, employees are more likely to have a positive self-image and trust in their capabilities to discharge their work duties. The findings in the present study are consistent with pertinent literature regarding interpersonal relationships, collaboration and individuals feelings of their ability to perform their assigned tasks.

Solidarity represents psychological and social closeness between persons that is generated through trust and self-disclosure (Wheeless, as cited in MacDonald et al., 2019). Bakar and Lee (2020) also indicated that solidarity is contingent on trust among colleagues and members of a workgroup. This perception of trust, if present, breaks down relational difficulties, which in turn motivates individuals to take initiative and have the freedom to risk vulnerability. This finding in the present study is consistent with both the sense of community theory and the Job-demand resource model. Interpersonal solidarity and a feeling of belonging to a work community enable the administrative staff to go out of their way and request for, or provide assistance and relevant work-related information. This is consistent with the view of Skaalvik and Skaalvik (2019) who observed that strong interpersonal solidarity makes individuals better informed and willing to share and receive relevant work-related information. This could explain the positive relationship between interpersonal solidarity and occupational self-efficacy, as solidarity gives hope for mutual commitment and a feeling of belonging to a work community.

Consistent with the job-demand resource model, interpersonal solidarity is considered an organisational resource, because it connotes a form of social support from work colleagues or superiors (Milledzi et al., 2018; Schaufeli & Bakker, 2004) which makes individuals feel capable and less intimidated to take initiatives at work. Similarly, interpersonal solidarity is about a feeling of belonging to a work community (Simms, 2012), and this sense of community brings meaning and fulfilment in the shared commitment to the common good of the community of work organisation (Sandelands, 2017). This engenders a sense of worth and inspiration, leading to enhancing confidence and enthusiasm at work. Baker and Lee (2020) stressed that the sense of meaning and the experience of mutual social support that characterises interpersonal solidarity boost the feelings of energy, inspiration and fulfilment among work colleagues. Indeed, John Paul's conception of solidarity as a firm and persevering determination to commit oneself in a community of work has been reinforced by the findings in the present study.

Organisational practitioners noted the values of solidarity at the workplace and their relevance for organisational success. Indeed, Sanders and Schyns (2006) emphasised that the success of any business organisation depends on the extent of solidarity among coworkers, and between supervisors and subordinates. The degree of solidarity perceive among work colleagues and their supervisor creates a congenial environment for trust and openness of communication (Sanders et al., 2006). Low levels of solidarity have been found to relate withholding of relevant work-related information, and negative emotions such as anger and fear, whereas high solidarity encourages the open display of positive emotions and sharing of relevant work-related information (Diefendorff, Morehart, & Gabriel, 2010). A high level of solidarity could create a psychologically safe work environment that would engender confidence in the discharge of their work duties.

The findings also indicate that good interpersonal solidarity could enhance work engagement. When a sense of closeness that develops among organisational members, the likelihood of them exerting more energy toward the attainment of the shared corporate goal would be high as a result of shared feelings, similarities and intimate behaviours. The findings in the present study are consistent with extant literature (e.g. Baker and Lee, 2020). Workplace friendship increases support and resources that help individuals to accomplish their job, reduce stress and provide increase communication, cooperation and energy (Fine, 1986). Consistent with the job-demand resource model, solidarity provides social support to the individuals that serve as an organisational and psychosocial resource, and this brings about increased work engagement (Schnorpfeil et al., 2002).

Hamilton (2007) suggested that, when there is a positive interpersonal relationship at the workplace, employees might feel comfortable with their workplace friends and reduce feelings of insecurity and uncertainty, they would also share more information and empathy with workplace friends about work-related problems and concerns. Satisfying work relationships further engenders satisfying and meaningful work, resulting in more engagement at work (Ducbarme & Martin, 2000). Furthermore, positive interpersonal relationships and a sense of community at work promote the exchange of work-related information, words of encouragement, confidence, trust, respect and critical feedback, which may increase enthusiasm and a positive attitude at work (Jehn & Shah, 1997).

In effect, a feeling of interpersonal solidarity has the potential to boost the confidence and trust that work members have in each other and enhance their self-worth (self-efficacy). The feeling of self-efficacy on the job would further culminate into a higher level of engagement at work. Thus, occupational self-efficacy could be a mechanism through which interpersonal solidarity leads to engagement at work. This supports our fourth hypothesis, and the finding of occupational self-efficacy partially mediating the relationship between interpersonal solidarity and work engagement.

The findings further suggest that, though both interpersonal solidarity and occupational self-efficacy positively predicted work engagement, occupational self-efficacy was a stronger predictor than interpersonal solidarity. This means that occupational self-efficacy is a more proximal antecedent of work engagement than interpersonal solidarity. When the two are present at a workplace, engagement would be far greater than when only one is present. This is consistent with the findings of series of studies by Xanthopoulou and colleagues (Xanthopoulou et al., 2008; Xanthopoulou et al., 2009a; 2009b) from which they concluded that job opportunities contribute to personal resource growth, which in turn, encourages work engagement.

4.3 Occupational self-efficacy and work engagement

The present study also found a positive significant relationship between occupational self-efficacy and work engagement. This is also consistent with some of the previous studies that found occupational self-efficacy being a significant positive predictor of the level of engagement at work (e.g. Chaudhary et al., 2013; Pati & Kumar, 2010; Salanova et al., 2003; Xanthopoulou, 2007, 2008, 2009a, 2009b). Salanova et al. for instance, demonstrated the importance of self and collective efficacy in explaining work engagement when they reported that groups with higher levels of collective efficacy showed high engagement and group performance (Salanova et al., 2003). Similarly, Pati and Kumar (2010) found that occupational self-efficacy is related positively to work engagement. The present finding is, is thus consistent with extant literature and the social cognitive theory, which indicates that efficacy beliefs relate positively with emotions, such as enthusiasm, satisfaction, inspiration and comfort, and these positive feelings, in turn, engenders confidence to positively engagement at work.

5. Conclusions and contribution to literature

The paper conclude that the level of interpersonal solidarity among the administrative staff in the public universities is appreciable, but could be enhanced, as it is a significant predictor of both occupational self-efficacy and work engagement. We also conclude that occupational self-efficacy is a stronger and proximal predictor of work engagement than interpersonal solidarity is. Occupational self-efficacy could therefore be the intervening mechanism through which solidarity could influence engagement at work.

The present study has contributed significantly to the literature, as it is one of the first to have been conducted in Ghana with a sample of administrative staff of public universities to examine their interpersonal solidarity and how it relates to self-efficacy in the work context, and work engagement. The Ghanaian society is considered to be communal, and so solidarity and a psychological sense of community are core elements of Ghanaian work organisations.

5.1 Practical and policy implications

The present study found the level of interpersonal solidarity among the administrative staff to be moderate. Given the relevance of interpersonal solidarity in any work community, particularly, in communal societies, such as Ghana, the management of the universities must take appropriate steps to

improve the level of solidarity among the administrative staff and other workers. This could include sensitivity training sessions, regular get-together programmes, weekly unit or section-based voluntary religious meetings, among others. Efforts to enhance the level of solidarity would engender trust and confidence among the workforce, which would, in turn, boost their self-efficacy and energise the workforce for higher engagement.

The levels of occupational self-efficacy and work engagement were found to be high in our sample of administrative staff of public universities. Even though these measures were high, there is still the need for regular in-service training and other training workshops to be continued to maintain their level of self-efficacy and engagement.

These policy recommendations are especially critical, since the key findings of the paper suggest that interpersonal solidarity is a significant element in boosting occupational self-efficacy, and that both interpersonal solidarity and occupational self-efficacy constitute critical factors of work engagement.

5.2 Limitations and future research

Given the relatively small sample size (as a result of the Covid 19 challenge) in our study of the university administrators, we recommend that further studies be conducted in a different work context, with larger samples to enhance the external validity of the findings. Related to this is that, the sample in the present study was obtained through a convenience process (consecutive), again due to Covid 19 challenges. We, therefore, recommend future studies to employ multiple modes of data collection, including online, mail, telephone and personal distribution (if possible) of questionnaires to enhance the representativeness of the sample.

The finding of the significant mediation role of occupational self-efficacy in the relationship between interpersonal solidarity and work engagement calls for further psychosocial and organisational resources to be explored, to if possible, expand the job-demand resource model. There is also the need for a psychological sense of community and interpersonal solidarity to be tested to appreciate the degree of relatedness of the two concepts, and how they relate with work experiences and outcomes. Furthermore, both generalised self-efficacy and occupational self-efficacy could be studied together to explore how each will relate to critical work-related variables and outcomes.

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