

INSTRUMENT: PRECARIOUS WORKING CONDITION (IPWC) INTEGRATING MIXED MODE OF RESEARCH IN INSTRUMENT CONSTRUCTION

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Several instruments exist in the human resource and organizational behavior arena to measure concepts like the work culture, work climate, work values, workplace behavior etc., that to provide insight into, employee's perception towards the organizational environment. However, several such measurements do exist in management and allied social science disciplines that are insufficient in measuring the concept 'precarious working condition'. Even though, this concept is experienced by several, but less discussed, deliberated and acknowledged in, since the nature of precarity varied from organization to organization. In this context, a cross country study was conducted to identify the root cause of 'precarious working condition', with an objective of defining properly the concept, contextualizing the topic to oil palm plantations, further to develop an instrument to measure it. The study followed mixed methodology, integrating interpretivist and positivist approaches. Following the triangulation method, the study followed grounded theory, case studies and Delphi technique to identify and fix the variables in relation to precarious working condition and further to test, the validity and reliability, the study followed factor analysis. The outcome of the study is the development of an instrument that to measure precarious working condition in oil palm plantations.

Introduction

Precarious work is a complex concept and define variables with characteristics from countries to countries. In general, the concept of precarious working condition tries to get the meaning of insecurity, instability associated with modern employment relations. One of the key problems with the concept of precariousness is that there is no commonly accepted definition in the literature. There are also a variety of terms used that may refer to precarious work, such as 'insecure workers', 'contingent work' or 'casual work'. Precarious working condition a concept that is not much widely deliberated, but it will be having high impact on individual and societies.

Review of Literature

The term precarious work presumes focus on a workplace that can be distinguished from life outside of work. Vosko (2010) utilizes many of the characteristics of precarity, particularly as they relate to social location, and social context; thus, "precarious employment can be defined as work for remuneration characterized by uncertainty, low income, and limited social benefits and statutory entitlements. Precarious employment is shaped by the relationship between employment status

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(i.e. self- or paid employment), form of employment (e.g. temporary or permanent, part-time or full-time), and dimensions of labor market insecurity, as well as social context (e.g. occupation, industry, and geography) and social location (or the interaction between social relations, such as gender and legal and political categories, such as citizenship).(Vosko, 2010).

The International Labor Organization (ILO, 1997) defines ‘precarious’ workers as either:

1. ‘workers whose contract of employment leads to the classification of the incumbent as belonging to the groups of “casual workers”’;
2. “short-term workers” or “seasonal workers”’; or
3. workers whose contract of employment will allow the employing enterprise or person to terminate the contract at short notice and/or at will, the specific circumstances to be determined by national legislation and custom.

The ILO (1997) defines ‘casual’ workers as having an explicit or implicit contract of employment, which is not expected to continue for more than a short period.

Tucker (2002) in her report characterizes the ‘precarity’ associate with the work, which is having close connection with the ILO framework and the nature of work prevalent in the oil palm plantations. The characteristics of precariousness are not absolute – they are best thought of as a continuum and it is the combination of a number of elements that causes precariousness, rather than any one aspect. The potential indicators of precariousness include:

- the job can be terminated with little or no prior notice by the employer;
- hours of work are uncertain or can be changed at will by the employer;
- earnings are uncertain or irregular;
- functions of the job can be changed at will by the employer;
- there is no explicit or implicit contract for ongoing employment;
- there is, in practice, no protection against discrimination, sexual harassment, unacceptable working practices;
- the job is low income – at or below the minimum wage;
- there is little or no access to ‘standard’ non-wage employment benefits such as sick leave, domestic leave, bereavement leave or parental leave;
- there is limited or no opportunity to gain and retain skills through access to education and training;and
- the task performed or the health and safety practices at the workplace makes the job unhealthy or dangerous.

In assessing precariousness, it is also important that the focus is not solely on the job itself or the nature of the contract, but takes into consideration the characteristics of the worker and their preferences.

Research Method

In order to arrive at the instrument on precarious working condition, this particular study follows a mixed method of research. Mixed-method studies have emerged from the paradigm wars between qualitative and quantitative research approaches to become a widely used mode of inquiry. Depending on choices made across four dimensions, mixed-methods can provide an investigator with many design choices, which involve a range of sequential and concurrent strategies. Studies that are products of the pragmatist paradigm and that combine the qualitative and quantitative approaches within the different phases of the research process. (Tashakkori & Teddlie, 2008). Mixed methods are inherently neither more nor less valid than specific approaches to research. As with any research, validity stems more from the appropriateness, thoroughness and effectiveness with which those methods are applied and the care given to thoughtful weighing of the evidence than from the application of a particular set of rules or adherence to an established tradition. (Bazely, 2004)

Qualitative Research Questions

1. How do you define precarious working condition?
2. What are the factors that closely related to precarious working conditions in general?

Triangulation

Triangulation refers to the use of more than one approach to the investigation of a research questions in order to enhance confidence in the ensuing findings. Since much social research is founded on the use of a single research method and as such may suffer from limitations associated with that method or from the specific application of it, triangulation offers the prospect of enhanced confidence. Methodological triangulation is defined as the use of more than two methods in studying the same phenomenon under investigation (Mitchell, 1986). This type of triangulation may occur at the level of research design or data collection (Bums & Grove, 1993). This particular study followed grounded theory, case studies and Delphi technique as the triangulation methods that to identify and fix the variables and categories in relation to precarious working condition.

Grounded Theory

Grounded Theory “is an in inductive, a theory discovery methodology that allows the researcher to develop a theoretical account of the general features of a topic while simultaneously grounding the account in empirical observations or data” (Martin & Turner, 1986). Grounded Theory provides a detailed, rigorous, and systematic method of analysis, which has the advantage of reserving the need for

the researcher to conceive preliminary hypotheses. It therefore provides the researcher with greater freedom to explore the research area and allow issues to emerge (Bryant, 2002; Glaser, 1978, 1992, 1998, 2001). The process of Grounded Theory encompasses an acknowledgment of the researcher bias, the selection of a data collection site, the data collection process, the process of coding and analysis, and the compilation of results. Coding and analysis includes three stages: open coding, selective coding, and theoretical coding. Open coding employs constant comparison, memoing, and results in themes, sub-categories, and core categories. These results guide the subsequent sampling of participants through theoretical sampling. The next stage of coding – selective coding – also employs a constant comparison and memoing. This stage results in dense, saturated core categories. The core categories are then sorted, written, theorized, and cross-referenced with literature, during theoretical coding. The results of this last stage of coding are provided a basic understanding the on concepts under study and a theoretical model. With the support of grounded theory methodology, this particular study identified the factors and the themes related to precarious working conditions.

Case Study

In the initial stage, the researcher has conducted preliminary five case studies that explore factors related to precarious working and living condition, ethical work climate and the psychological contract. These case studies have supported the research to get a grip on the topic under study with the content. Thus the first criteria used by the researchers include the short interviews with the employees from different workers in the plantation and developed short case-lets. Based on the number of workers the study considered 5 workers incorporating the representation from all. Through the interviews short- cases have been developed. Case study interviews are often used as part of the initial assessment and arriving at explicit and implicit variables based on the topic under study. Some of the case study content, which supported the researcher to get some insight into the precarious working condition and allied factors, has come up from case studies among the workers working in the oil palm plantations.

Worker 1

“I’m working in the plantation almost 20 years back. My health is losing day by day. I cannot do the harvesting job due to poor health. Now I am undertaking spraying job. It is almost 3 months I am engaged in the pesticide-spraying group. Everyone has to work as a group. Workers have to work on the stipulated working hours without having any consideration of pregnancy or illness. Many have fallen in sick due to the chemical spraying and lack of good water facility in plantations. The washed away water causes reddish and itch to our skin. The chemical spray causes bad cough and pain in the chest, as we smell the toxic substance. Every day

I have back pain and shoulder pain. It may be due to my age. Walking with the ‘pom’ spray tank of 15kg to a long pacing also gives leg problem. During night sleep, muscle pull will always occur. My passport renewal is depending on the company and is uncertain.”

Worker 2

Myself and a group of people came to plantations from the same Indonesian province in Sulewasi (Bugis Endrekan clan) long back and stay in same old long housing “Kongsi” made of wood. Our food style is depending on what ever available in the plantation except rice, sugar, salt, coffee and since we cannot go out frequently for food provisions. We rare chicken, goose and duck. We plant some vegetable near to our housing area to save of daily expenses and we also collect wild vegetable like “pakis”, “pucukubikayu” and tapioca. My wife currently pregnant for my first baby so I don’t allow her to work till my kids grow. I earn only RM600 monthly as fertilizer. I am still waiting for a harvesting vacancy so that I can earn more. I did extra jobs like collecting lost fruit and pruning, during off season. Let me tell you, in my housing area many people are affected by Malaria recently due to poor hygiene. I am just worried about my wife’s health; we do sleep inside mosquito netting “kelambu” to safeguard our health. Every month I will take debt “MasukBuku 555” from the shop nearby, around RM250 monthly. We never saved more than RM50 monthly. All provisions and amenities are really expensive.

Delphi Method

This particular study followed the Delphi technique as its design of method to explore the categories and factors related to precarious working condition in oil palm plantations. As it is known, the Delphi technique is one of the methods, which started its usage in 1950, in order to get consensus, which is linked to real world knowledge coming through experiences on the area related to research topics. It is pointed out by Dalkey (1963) that the consensus on decisions which is coming from heads is better than one, or... n heads are better than one. Delphi technique is considered as one of the effective communication process with the objective of making deep analysis base on deliberation on a specific problem in order to set the goal, undertake a probe into the policy or to make an effective prediction of the occurrence of future events (Kumar, 2013). Basically the Delphi technique is conducted in the form of semi structure interaction and interview. High concentration on the process is envisaged to ensure the rigorous. During midFebruary to the mid of May 2014 Delphi process organized among the resource people carefully selected based on the expertise knit with precarious working conditions and interviews thereby.

Based on the suitable time for the resource person interviews were arranged, during February 2014 to middle May 2014. Direct interviews are conducted to

gather information from the experts. 20 experts from the Plantation Managers, Plantation Workers, Mandors of Plantations, Officers of Consulate Indonesia, Officers of Detention Centers, Officers of Immigration, Humana (NGO), Schools for Migrant Workers, Trade Union Leaders, Contractors, Faculty Members and Dean of Social Sciences, Universiti Malaysia, Sabah (UMS), MPOB officers and Research Scholars were identified and approached by email, walk in or telephone and were invited to take part in the study. Telephonic interview is conducted to gather information from the respondents. 40 experts from the industry and academia were identified and approached by email or telephone and were invited to take part in the study. All the clarifications related to the objective of the study were made by the researcher. However, 30 experts were being interacted and communicated, only 20 experts shown their willingness to participate in the discussion. Finally, 20 experts were interviewed by walk in, telephone and through email. The conversations taped recorded, and manually analyzed. The procedural steps in adopting the Delphi technique were as follows.

Expert Panel Identification

The group of professional was made from specialists having high knowledge and expertise in plantation related. They are closely associated with plantation, as consultants, government body, Top level managers, NGO, Consulate, Professors, Researchers and Academicians. The specialized areas of these expert members include, 12 male members (60%) and 8 female members (40%). These dynamic groups of panel of experts are knowledgeable and familiar to give relevant opinions and an admissible understanding of the precarious working condition.

Qualitative Analysis

Round 1

In the first round, the Delphi process traditionally begins with an open-ended questionnaire. The open-ended questionnaire serves as the cornerstone of soliciting specific information about a content area from the Delphi subjects (Custer, Scarcella, & Stewart, 1999).

The Questions

1. How do you define precarious working condition?
2. What are the factors that closely related to precarious working conditions in oil palm plantations?

Round 2

The second round concentrates into categories and the items, which are closest to the concept precarious working condition. Followed by the procedure the Delphi

members were received the second questionnaire and accordingly they were required to rate or rank order the items in order to establish first level preferences among item incorporated into. At this stage, based on the decision and deliberation, agreement and disagreement on the items consider in relation to precarious working condition were made. Care should be taken that, the number of Delphi iteration should be based on how far consensus have been arrived at effectively at the concept of precarious working conditions in the study.

Round 3

In the third round, each Delphi panelist receives a questionnaire that includes the categories and items ratings, summarized by the investigators in the previous round and are asked to revise his/her judgments or “to specify the reasons for remaining outside the consensus” (Pfeiffer, 1968). This round gives Delphi panelists an opportunity to make further clarifications of both the information and their judgments about the relative importance of the categories and items. Second level screening of the 128 categories which were having a high and low influence on precarious working conditions identified with corresponding items. The process further identified 64 categories, which are having high and low proximity of the precarious working conditions identified. Classification of the items in 64 categories of 2 factors was being made with appropriate loaded items. Thematic presentation and the categorization of the items were done.

Round 4

This round is the last round in which the researchers tried to eliminate the minority opinion in order to capture the maximum level of consensus based on their rating on the categories and items which related to precarious working conditions. Cross checking of this category and items were thoroughly made and the suitability clearly ascertained for fixing up the categories and items related the factor precarious working conditions. During third level, screening of the 30 categories of 2 factors which were having items with high and moderately high proximity of precarious working conditions are identified. Sought the expert opinion on the appropriateness of the core factors selected for the study.

The first factor considered for the study is the Precarious Working Conditions, which divide into two main conditions which are Working Conditions and Living Conditions in the plantation. The experts acknowledged 31 items for working conditions and 31 items for explaining the living conditions. The major factor working conditions consists of 15 categories. Low wage (90%), lack of supervisory support (90%), remote location (90%), long working hours (90%), work pacing (90%) and monotonous job (90%) are the major categories in precarious working condition, identified by the experts in relation to imparting appropriate working conditions in the plantations. Second categories like forced labor (85%),

TABLE: 1 DELPHI APPLICATION ON PRECARIOUS WORKING CONDITION

<i>PWC</i> S/N	<i>Factors</i>	<i>Categories</i>	<i>No.</i> <i>Items</i>	<i>No of</i> <i>Experts</i> (N=20)	<i>% of</i> <i>Experts</i>
1	Working Conditions	Low wage	2	18	90%
		Forced Labor	3	17	85%
		Discrimination	2	17	85%
		No freedom at work	3	15	75%
		Less safety	2	16	80%
		Less security	2	16	80%
		Hazardous Job	2	16	80%
		Physical abuse	3	17	85%
		Lack of supervisory support	2	18	90%
		Rigid rules, regulation	1	17	85%
		Remote location	1	18	90%
		Long working hours	1	18	90%
		Work pacing	2	18	90%
		Monotonous Job	2	18	90%
		Lack of group cohesiveness	3	15	75%
2	Living Conditions	Remote location	1	18	90%
		Poor hygiene	2	17	85%
		No electric supply	3	17	85%
		No clean water	2	18	90%
		Big family	2	18	90%
		Low quantity food	3	18	90%
		Poor housing	3	18	90%
		Frequent illness	3	17	85%
		No education to children	1	18	90%
		Isolated living	1	18	90%
		Indebtedness	3	18	90%
		Low social engagement	1	17	85%
		Less recreations	1	16	80%
		No transport facilities	2	17	85%
		Stateless Conditions	3	18	90%

discrimination (85%), physical abuse (85%) and rigid rules regulations (85%). Third rank categories are less safety (80%), less security (80%), hazardous job (80%). The final rank categories in working condition are no freedom at work (75%) and lack of group cohesiveness (75%).

The second factor considered for the study is the Living conditions which interrelated directly to precarious working conditions. Within the second factor the experts identified 31 items that are closely related to Precarious working conditions. The major factor of living conditions consists of 15 categories. The table showed that remote location (90%), no clean water (90%), big family (90%), low quality

food (90%), poor housing (90%), no education to children (90%), isolated living (90%), indebtedness (90%) and stateless conditions (90%) as the prominent factor which closely knit with living conditions. Further the study pointed out the categories like poor hygiene (85%), no electric supply (85%), frequent illness (85%), low social engagement (85%) and no transportation facilities (85%). The final categories are less recreations (80%).

Quantitative Research Method

For the purpose of testing the factors identified by the researcher through qualitative triangulation method, several statistical tools and methods employed. These include reliability and factor analyses to test the goodness of measures.

Factor Analysis and Reliability Test

Prior to any validity and reliability tests, the tests of assumptions for multivariate analysis will be conducted to ensure that the data met the normality, linearity, multicollinearity, and homoscedasticity assumptions. The next important step in data analysis is to understand the dimension of the variables in the proposed framework or relationships posited in empirical research (Hair et al., 2010). In other words, factor analysis should be performed to identify the structure of interrelationship among a large number of items in the study. This may be done by defining common underlying dimensions, commonly known as factor (Hair et al., 2010). Another purpose for performing factor analysis is to determine whether the data could be condensed or summarized into smaller set of factors (Malhotra, 2010). The dimensions of the scale were examined by factor analyzing the items using the principal components analysis with Varimax rotation. Minimum eigenvalues of 1.0 helped determine the number of factors or dimensions for each scale (Hair et al., 2010). Although factor loadings of 0.30 to 0.40 are considered acceptable, however, factor loadings greater than 0.50 are generally necessary for the practical significance (Hair et al., 2010). Hence, the items for a factor will be retained only when the absolute size of their factor loading is above 0.50. To test the internal consistency of the measurement, reliability analysis is performed on the factors extracted using the benchmark suggested by Nunnally (1978). Generally, the closer reliability score gets to 1.0, the more reliable the scale would be. According to Nunnally (1978), the reliability score of 0.70 and above is acceptable and those above 0.80 are considered good. As noted by Peter (1979), reliability scores that less than 0.60 is still considered acceptable for social science studies. Following the literature, a reliability score of 0.70 is used as the benchmark for this study. It should be noted that all the negatively worded items in the questionnaire were first being reversed coded prior to the reliability test. In the case of coefficient alpha value is smaller than 0.70, the item with the lowest corrected item-to-total correlation is removed until then 0.70 levels are met (Pallant, 2001).

Ethical Considerations

In both the phases, the ethical considerations were well followed by the researchers due to the sensitive issues related to the topic. This sensitivity is perceived from the point of 'workers'. Workers aspired to ensure their anonymity during all stages of research. The workers were assured that the summary data would not be disseminated to the management and further in no way the responses of them can be identified. It is also assured that the data will be destroyed keeping the documents after a reasonable period. Instead of the names of the workers, the data coded with numbers to ensure the anonymity both in case studies as well as quantitative data collection procedures.

Validity and Reliability

Validity is the ability of a tool to measure what is supposed to measure. The validity of an instrument is the degree to which an instrument measures what it is intended to measure (Polit & Hungler 1993). Validity tests, then compare and measure the concept that a researcher supposed measure with its accuracy. Precisely the degree to which an instrument used by the researcher measures what he/she intended to measure. It is expected that the instrument should ensure the content, construct and face validity.

Dealing the Content Validity

The objective of this phase was to get the agreements of experts on the concept, constructs and content of the items selected in the draft 'Precarious working condition'. To get the content validity, in addition to the literature review, the study was incorporated triangulation method of qualitative research in which expert identification of the variables that selected under organizational and individual factors related to 'precarious working condition' were made. The Delphi technique, content analysis, and short case study method followed thorough interviews and discussion techniques supported the researchers to ensure content validity of the variables considered for the study. Especially, the Delphi Technique followed in the research was supported to get the right content of each item that incorporated in each factor. Thus, in general, the constructs and the content of the items were agreed upon with the correction and consent from the experts. Based on their comments on each parameter and items rewording of the items were made which was further fine-tuned for development of the instrument.

Dealing the Face Validity

The study further ensured face validity by examining the instrument looks as though it is measuring what it was supposed to measure. Face validity is a necessary procedure in any instrument development process (Benson & Clark 1983). To get the face validity, experts in the field of management and human resources areas,

statisticians, and academicians were identified. Thus the experts in the field of management and human resources areas, statisticians, and academicians were cross verified the face validity of the instrument. To end with, the construction of the items based on the concepts of the constructs, sub-constructs that developed out of the literature review and case interviews, was made. It was pointed out by the experts that in order to develop these items into an instrument mode, factor analysis to be conducted in the later stage. It was also suggested by the experts that the item's length, which was observed during the Delphi technique to be shortened before factor analysis application that ensure better understanding to the respondents.

Dealing the Construct Validity

To test the construct validity the instrument is well correlated to the underpinning theories like social exchange theory, job demand and resource theory, theory of planned behavior, theory of motivation, theories of leadership, job satisfaction, work stress, and work culture, which were closely knit with the concept organizational factors and individual factors in relation to workers' perception towards working and living conditions that correlated to precarious working condition. Validation of the instrument and the concept both were done on factors related to members 'precarious working condition'. Herzberg's Two Factor Theory (1959) was confirmed by the researcher and experts that closely knit with the concepts, variables and items incorporated in the study.

Reliability

TABLE 2: ITEMS, THEORETICAL RANGE AND CRONBACH ALPHA-INSTRUMENT- PRECARIOUS WORKING CONDITION (IPWC)

<i>No</i>	<i>Factors</i>	<i>No of Items</i>	<i>Theoretical Range</i>	<i>Standardized Alpha</i>
1	Wage	2	2-20	.798
2	Forced labor	1	1-10	.800
3	Discrimination	2	2-20	.821
4	Freedom at work	3	3-30	.793
5	Safety	2	2-20	.799
6	Security	4	4-40	.796
7	Hazardous work	3	3-30	.804
8	Physical abuse	3	3-30	.822
9	Rules and regulation	2	2-20	.789
10	Remote location	2	2-20	.795
11	Working hours	2	2-20	.797
12	Monotonous	2	2-20	.767
13	Group cohesiveness	2	2-20	.773

Reliability means the consistency or repeatability of the measure and the confidence we can place on the measuring instrument to give the same numeric value when the measurement will be repeated on the same subject. The purpose of this procedure was to determine which items should be retained and which items should be dropped based on the values of the Cronbach Alpha (Creswell, 2008; Gall & Gall, 1998). A reliable instrument is one that would provide the identical results if used recurrently by the same group.

When the researcher started qualitative research through interviews, case studies and field observation, the researchers developed well, acquaintances with the workers working on the plantation. By ensuring adequate privacy to the workers in the organizational environment, the researchers ensured better psycho-social environment for data collection.

Dealing the Item's Reliability

The study followed three stages. In the initial stage, the study considered 50 items under 13 factors and subjected to pilot testing with 30 respondents from each plantation from different countries. A bipolar interval scale was used representing with 1 as 'Strongly Disagree' and 10 representing 'Strongly Agree'. The instrument retained the same order of response categories to minimize confusion amongst respondents. Later, with due consideration to the Cronbach Alpha values of each item in the draft instrument, some of the items, which were having less than 0.5 dropped and others were gathered into. A 10-point interval scale with 30 items were finally considered.

Managing the Standardization Process

In order to establish the standardization process, the oil palm plantation in four countries identified. To make a comparative analysis five groups of workers from different countries was selected with a size of 30 workers from each plantation belong to different countries. As indicated above these plantations are located in different countries that to ensure the regional representation where oil palm plantations are located. Further, an instrument of 30 items and 10 point interval scale scales were administered into these five groups. It was observed that the Cronbach Alpha values of the items remained almost the same. Based on the inference it is further inferred that this instrument is highly reliable to be used in any oil palm plantations across the countries in the Asian region. Table 3 shows that the values of the Cronbach alpha of the constructs for five groups in the four different countries when compared were more or less the same.

Factor Analysis Procedure

The study intended to measure worker's perception on 'Precarious Working Condition' (PWC) and develop an instrument (IPWC). Henceforth, the ultimate

TABLE 3: PRECARIOUS WORKING CONDITION FACTORS IDENTIFIED AMONG FIVE GROUPS: FACTOR ANALYSIS PROCEDURE (N=30)

No	Constructs	Cronbach Alpha (% Point Likert Scale)	Malaysia 1	Indonesia 1	Indonesia 2	Thailand 1	Nigeria 1
1	Wage	.798	.800	.799	.800	.801	.800
2	Forced labor	.800	.794	.781	.795	.793	.795
3	Discrimination	.821	.801	.770	.793	.803	.791
4	Freedom at work	.793	.823	.773	.777	.800	.804
5	Safety	.799	.798	.801	.782	.799	.792
6	Security	.796	.789	.805	.800	.796	.799
7	Hazardous nature of work	.804	.793	.794	.794	.796	.785
8	Physical abuse	.822	.799	.796	.822	.812	.789
9	Rigid rules and regulation	.789	.801	.800	.796	.795	.787
10	Remote location	.795	.811	.789	.791	.800	.799
11	Working hours	.797	.791	.791	.801	.790	.805
12	Monotonous	.767	.789	.756	.772	.792	.775
13	Group cohesiveness	.773	.771	.772	.769	.780	.771

phase of this process of developing the instruments was to conduct the factorial analysis procedure on this draft instrument and 10-point scales. The objective of doing factorial analysis was to ascertain whether the items for each construct really fit in constructs. This procedure informs which items should be excluded or included with one construct. This was done by measuring the correlation values between the items within the given constructs.

Factorial Analysis Results for Items Rejected in Each Construct

Further, during the factor analysis, those items that were scored 0.5 and below were automatically rejected. Initially, the draft questionnaire was consisted of 50 items. The total number of items rejected based on the draft instrument with 50 items and 10 point interval scales were 20 factors. The total variance explained for all the factors under consideration in the study is 0.697. The final instrument after rejecting the items, which were scored more than 0.5 under 30 sub-variables of major variable 'precarious working condition' further mentioned below.

Interpretation of the Index Level of Precarious Working Condition

High Scores: At the Highest Level

High scores

A self-rating score within this range indicates the plantations having a working condition which is highly precarious in nature. This indicates that there is a high

TABLE 4: ITEMS FOR THE VARIABLES AND FACTOR ANALYSIS –
PRECARIOUS WORKING CONDITION

<i>Factors and Item no</i>	<i>Factor Loading</i>	<i>α</i>	<i>Eigine Value</i>	<i>Explain Variance (%)</i>	<i>Total Explain Variance(%)</i>
Wage					
LW1	.800				
LW2	.801	.798	2.001	9.916	
Forced Labor					
FL3	.799	.800	1.999	7.999	
Discrimination					
D4	.801				
D5	.812	.821	1.871	7.990	
Freedom at work					
FW6	.856				
FW7	.859	.793	1.870	6.810	
FW8	.848				
Safety					
SF9	.821				
SF10	.791	.799	1.795	4.781	
Security					
SE11	.831				
SE12	.840	.796	1.780	4.610	
SE13	.843				
SE14	.819				
Hazardous Nature of work					
HW15	.861				
HW16	.866	.804	1.777	4.609	
HW17	.852				69.737
Physical Abuse					
H18	.821				
H19	.793	.822	1.761	4.608	
H20	.830				
Rules and regulations					
RR21	.796				
RR22	.860	.789	1.698	4.607	
Remote location					
RL23	.856				
RL24	.859	.795	1.691	3.545	
Working hours					
WH25	.820	.797	1.682	3.543	
WH26	.816				
Monotonous					
M27	.800				
M28	.811	.767	1.679	3.400	
Group cohesiveness					
GC29	.816				
GC30	.800	.773	1.675	3.319	

level of exploitative working conditions and the workers have less appreciation towards the working condition. The workers have the feeling that the management has high task orientation rather concern orientation.

Suggestion Proposed

This type of working condition, has the characteristic feature of exploitative labor practices widely shared by the workers in the plantations. The employees are frustrated with their work activities and work values widely held. A feeling of mistreatment, humiliation and insult workers feel at work. Attachment to the work and the organization will be seldom observable in this precarious working environment. This precarity will be precipitated in the form of poor level of work commitment, lack of loyalty, employee disengagement and work stress.

Moderate Scores: At the Moderate Level

Moderate Scores

A self-rating score within this range indicates the plantations having a moderate level working condition which is moderately precarious in nature. This indicates that there is moderate level of exploitative working condition and the workers have more or less 'not as much' of appreciation towards the working condition. The workers have the feeling that the management having moderate level of task orientation and concern orientation.

Suggestion Proposed

This type of working condition is having the characteristic feature of moderate level of exploitative labor practices widely shared by the workers in the plantations. The employees are relatively less precarity associated with their work environment. The management has more or less some concern towards the workers though have high task orientation. This moderate level of precarity will be precipitated in the form of average level of work commitment, low level of loyalty, moderate level employee disengagement and work stress.

Low Scores: At the Low Level

Low Scores

A self-rating score within this range indicates the plantations having a better working condition which is seldom precarious in nature. This indicates that there is low level of exploitative working condition and the workers have better appreciation towards the working condition. The workers have the feeling that the management takes care of them and there is an acceptable form of task and concern orientation.

Suggestion Proposed

If an employee scored within this range, the management should take appropriate steps to retain their happiness and job satisfaction by strategizing high concern orientation. Such work environment will be leading to workers better attachment to the work and organization. It will lead to high level commitment, loyalty and low level of attrition.

Conclusion

Precarious working condition an environment that closely associated with the management style of the organization. Distant level, one can observe a close association of organizational leadership, and work culture preferred by the top management with Precarious working condition. Workers perception towards the work environment is one of the indicators with which the researchers can assess the management style as well as the leadership pattern followed by the organization. How the precarity of working environment existing in plantations that determine the level of labor shortage, absenteeism, presenteeism etc., since the attitude of employees may link to workers intention leave from the plantation. Identification of these precarious working condition factors that would support the management to understand the employees' perception and prevent the negative consequences like high level of labor outlay from the plantation. This instrument on precarious working condition thus paves a better insight into the integrated factors of precarious working conditions, which answers why, how plantation workers perceive the working environment prevalent in the plantation and workers affirmative attitude towards the work and work organization. The reliability analysis was done in five groups belong to four Asian countries. The instrument's validity and reliability further need to be empirically observed with more number of worker's participants by integrating extensive level of qualitative and quantitative interventions in various countries for its better standardization and generalization.

Reference

- Bazely, P. (2004). Issues in Mixing Qualitative and Quantitative Approaches to Research. In. R. Buber, J. Gadner, & Richards, L. (Eds.) *Applying Qualitative Methods to Marketing Management Research*. UK: Palgrave Macmillan, 141-156.
- Benson, J., & Clark, F. (1983). A Guide for Instrument Development and Validation. *American Journal of Occupational Therapy*, 36, 789-800.
- Bryant, A. (2002). Re-grounding Grounded Theory. *JITTA: Journal of Information Technology Theory and Application*, 4(1), 25.
- Bums, N., & Grove, S.K. (1993). *The Practice of Nursing Research. Conduct, Critique, and Utilization*. Philadelphia: Saunders.
- Creswell, J. W. (1998). *Qualitative Inquiry and Research Design: Choosing among Five Traditions*. Thousand Oaks, CA: Sage Publications.

- Creswell, J. W. (2008). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (3rd ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Custer, R. L., Scarella, J. A., & Stewart, B. R. (1999). The Modified Delphi Technique: A Rotational Modification. *Journal of Vocational and Technical Education*, 15(2), 1-10.
- Dalkey, N. C., & Helmer, O. (1963). An Experimental Application of the Delphi Method to the Use of Experts. *Management Science*, 9, 458-467.
- Gall, J. P., & Gall, M. D. (1998). *Instructor's Manual* (4th ed.). New York: Longman.
- Glaser, B. G. (1978). *Theoretical Sensitivity: Advances in the Methodology of Grounded Theory*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (1992). *Basics of Grounded Theory Analysis*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (1998). *Doing Grounded Theory. Issues and Discussions*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (2001). *The Grounded Theory Perspective: Conceptualization Contrasted with Description*. Mill Valley, CA: Sociology Press.
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate Data Analysis*. Seventh Edition.
- Herzberg, F. T. (1959). In Herzberg, F. T., (1973). *Work and the Nature of Man*. New York: New American Library.
- International Labour Organisation. (1997). Part-time Work: Solution or Trap?. *International Labour Review*, 136(4), 1-18.
- Kumar, D.M. (2013). *Ways and Means of Research Method* (1st Ed). Research India Publications, New Delhi, India.
- Malhotra, N. K. (2010). *Marketing Research: An Applied Orientation*. New Jersey: Pearson Education.
- Martin, P.Y., & Turner, B.A. (1986). Grounded Theory and Organizational Research. *The Journal of Applied Behavioral Science*, 22(2), 141-157.
- Mitchell, E. S. (1986). Multiple Triangulation: A Methodology for Nursing Science. *Advances in Nursing Science*, 8(3), 18-26.
- Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill.
- Pallant, J. (2001). *The SPSS Survival Manual: A Step-by-step Guide to Data Analysis using SPSS for Windows* (version 10). St Leonards, NSW: Allen & Unwin, Palo Alto, CA: Consulting Psychologist Press.
- Peter, J.P. (1979). Reliability: A Review of Psychometric Basics and Recent Marketing Practices. *Journal of Marketing Research*, 26(6), 17.
- Pfeiffer, J. (1968.). *New Look at Education: Systems Analysis in our Schools and, Colleges*. New York: The Odyssey Press.
- Polit, F., & Hungler, B.P. (1993). *Essentials of Nursing Research: Appraisal and Utilization*. 3rd edition. Pennsylvania: JB Lippincott. Prentice Hall, Upper.
- Tashakkori, A., & Teddlie, C. (2008). Introduction to Mixed Method and Mixed Model Studies in the Social and Behavioral Science. In V.L. Plano-Clark & J. W. Creswell (Eds.). *The Mixed Methods Reader*, 7-26.

Tucker, D. (2002). *Precarious' Non-Standard Employment – A Review of the Literature*. Labour Market Policy Group.

Vosko, L. (2010). *Managing the Margin: Gender, Citizenship, and the Regulation of Precarious Employment*. Oxford: Oxford University Press.

Appendix

INSTRUMENT: PRECARIOUS WORKING CONDITION (IPWC)

In the following pages, there are number of questions that may reflect your perception in association with working condition prevalent in the plantation where you employed now. By using a scale ranging from 'strongly disagree' to 'strongly agree', please choose the degree of agreement with your current circumstances by ticking (✓) on the right number (a number between 1 to 10) every question that most accurately reflects your perceptions. If you have trouble in understanding a question, answer to the best of your ability. You are required to answer these questions, which truly describe yourself. Your answers are very important to the accuracy of this study. (Please return the completed questionnaire in the enclosed self-addressed envelope at your earliest convenience).

		Questions									
		I am getting low wage									
		1	2	3	4	5	6	7	8	9	10
		My wage is lower compared to any other jobs available									
		1	2	3	4	5	6	7	8	9	10
		I do compel to work extra hours for better wage									
		1	2	3	4	5	6	7	8	9	10
		I feel that there is high discrimination on wage and dealing worker's									
		1	2	3	4	5	6	7	8	9	10
		I feel that there is considerable level of racial discrimination									
		1	2	3	4	5	6	7	8	9	10
Strongly Disagree		Seldom I do enjoy freedom at work									
		1	2	3	4	5	6	7	8	9	10
		Hardly ever supervisors provide freedom at work									
		1	2	3	4	5	6	7	8	9	10
		I do monitored by my supervisor all the time									
		1	2	3	4	5	6	7	8	9	10
		Work life is in risk with the use of unsafe equipment									
		1	2	3	4	5	6	7	8	9	10
		Precarious equipments make it practically difficult in discharging my tasks									
		1	2	3	4	5	6	7	8	9	10
		Work environment induces high tension and insecurity									
		1	2	3	4	5	6	7	8	9	10
		Hardly ever have long term employment in plantation									
		1	2	3	4	5	6	7	8	9	10
		Work organization rarely taken care of security									
		1	2	3	4	5	6	7	8	9	10
		Present job rarely provide economic stability									
		1	2	3	4	5	6	7	8	9	10
		Work environment invites wild life attacks									
		1	2	3	4	5	6	7	8	9	10

Strongly Agree

		Work organization is ineffective in chemical management		
		1 2 3 4 5 6 7 8 9 10		
		Hazardous environment invites high health surveillances		
		1 2 3 4 5 6 7 8 9 10		
		Physical abuses are quiet common during work		
		1 2 3 4 5 6 7 8 9 10		
		Workers are emotionally disturbed with harassment at work		
		1 2 3 4 5 6 7 8 9 10		
		Work place bullying lowers the quality of life and well being		
		1 2 3 4 5 6 7 8 9 10		
		Rules and regulations are too much rigid		
		1 2 3 4 5 6 7 8 9 10		
		The rules and regulations are intimidating		
		1 2 3 4 5 6 7 8 9 10		
		Remote location of work invites severe work pacing		
		1 2 3 4 5 6 7 8 9 10		
Strongly		Poor transport facilities to workers due to remote location		Strongly
Disagree		1 2 3 4 5 6 7 8 9 10		Agree
		Working hours always exceed scheduled working hour		
		1 2 3 4 5 6 7 8 9 10		
		Hardly ever get rest and leisure during long working hours		
		1 2 3 4 5 6 7 8 9 10		
		Hardly ever change in the work schedule		
		1 2 3 4 5 6 7 8 9 10		
		Nature of work is monotonous		
		1 2 3 4 5 6 7 8 9 10		
		There is lack of group cohesiveness among workers		
		1 2 3 4 5 6 7 8 9 10		
		Conflicts during work is quiet common		
		1 2 3 4 5 6 7 8 9 10		
