

work-family conflict than there was for those with less work-family conflict. Their study suggested that reducing the stress and interruptions at work, as well as offering opportunities to influence one's workplace, help to promote operating room (OR) to enhance nurses' health.

Objectives of the Study

1. To identify the factors influencing Job satisfaction of Dual and single career couples
2. To identify the level of job satisfaction of dual career and single career couples
3. To test the difference in Stress level of Single and Dual career couples

Target Population

The employees working in various types of manufacturing and service industries form the Target Population for this study; they have been selected in Urban, Semi-urban and rural areas throughout the Madurai district.

Sample Size

A pilot study is conducted among 30 employees each in rural, urban and semi-urban areas of Madurai district questioning their level of stress experienced by them in their companies. Based on this pilot study, the researcher has arrived at a sample size of 1000, on the basis of proportion of employees experiencing stress due their work.

Research Design

The study was empirical in nature. The design for the study is also empirical in nature and heavily relies on primary data. Empirical research is based on observed and measured phenomena and derives knowledge from actual experience rather than from theory or belief. The study is said to be empirical due to the application of statistical tools used for data analysis.

Factor Analysis for Job Satisfaction of Single and Dual career couples in Madurai

Factor analysis was used to reduce the number of variables contributing to Job Satisfaction of single career and dual career working couples in Madurai district; the study included as many as 16 variables and in order to reduce the number of variables and to find the main underlying constructs of Job Satisfaction, factor analysis was carried out and the

results of factor analysis are presented in Tables – 1 to 5.

Table 1 – KMO and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.593
Bartlett’s Test of Sphericity	Approx. Chi-Square	5687.027
	df	120
	Sig.	.000

The factor analysis can be applied to the data. The following table shows the number of components extracted with eigen values and cumulative variance explained by them. There are six factors resulting from the analysis explaining a total of about 72.063 per cent of the variations in the entire data set. The percentage of variation explained by the first five factors is 19.795, 15.847, 12.898, 8.797, 8.124 and 6.603 respectively after varimax rotation is performed.

Table 2: Factor Analysis – Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.167	19.795	19.795	3.167	19.795	19.795	2.411	15.068	15.068
2	2.536	15.847	35.642	2.536	15.847	35.642	2.075	12.971	28.039
3	2.064	12.898	48.540	2.064	12.898	48.540	1.996	12.472	40.511
4	1.407	8.797	57.336	1.407	8.797	57.336	1.841	11.509	52.021
5	1.300	8.124	65.460	1.300	8.124	65.460	1.627	10.167	62.187

6	1.056	6.603	72.063	1.056	6.603	72.063	1.580	9.876	72.063
Extraction Method: Principal Component Analysis.									

The following table represents the rotated component matrix using 0.20 as a cut-off point for factor loading for naming the factors. In this way we get six factors. Factor 1 will comprise of 4 variables related to **Promotion** – Making money is primarily a matter of good fortune, Promotions are usually a matter of good fortune, When it comes to landing a really good job, who you know is more important than what you know, and Most people are capable of doing this job well, if they make effort.

Factor 2 comprises of 4 variables relating to **Confidence** – On most jobs, people can accomplish whatever they set out to accomplish, A job is what you make of it, If you know what you want out of a job, you can find a job that gives it to you, and Promotions are given to employees who perform well on the job.

Factor 3 comprises of 2 variables related to **Interpersonal Relations** – It takes lot of luck to be an outstanding employee on most jobs, and to make a lot of money you have to know the right people.

Factor 4 comprises of 2 variables related to **Reward** – Most employees have more influence on their supervisors than they think they do, and People who perform their jobs well, generally get rewarded for it.

Factor 5 comprises of 2 variables related to **Luck** – Getting the job you want is mostly a matter of luck, and In order to get a really good job you need to have family members or friends in high places.

Factor 6 comprises of 2 variables related to **Grievances** – If employees are unhappy with a decision made by their boss, they should do something about it and the main difference between people who make a lot of money and people who make a little money is luck.

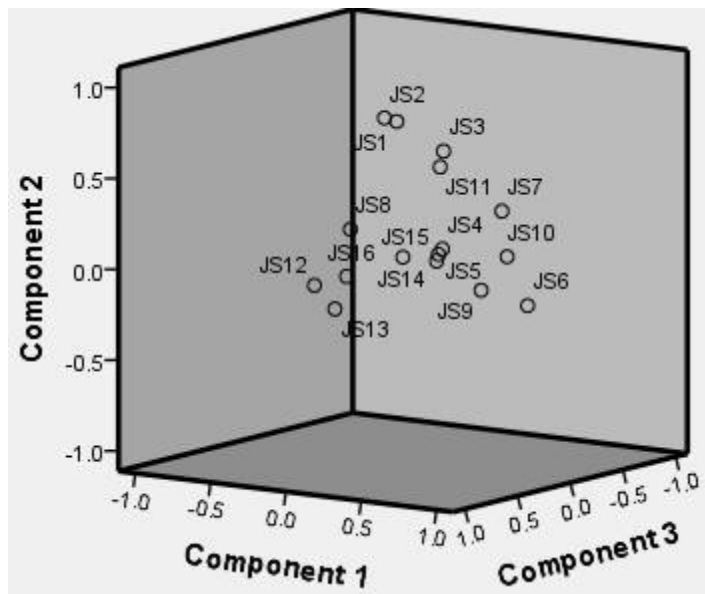
Table 3: Rotated Component Matrix

Factor	Statements	Component					
		1	2	3	4	5	6
	Making money is primarily a matter of good fortune	0.764					
	Promotions are usually a matter of good fortune	0.695					
Promotion	When it comes to landing a really good job, who you know is more important than what you know	0.664					
	Most people are capable of doing this job well, if they make effort	0.643					
	On most jobs, people can accomplish whatever they set out to accomplish		0.77				
Confidence	A job is what you make of it		0.702				

	If you know what you want out of a job, you can find a job that gives it to you	0.623				
	Promotions are given to employees who perform well on the job	0.592				
Interpersonal Relations	It takes lot of luck to be an outstanding employee on most jobs		0.832			
	To make a lot of money you have to know the right people		0.815			
Reward	Most employees have more influence on their supervisors than they think they do			0.863		
	People who perform their jobs well, generally get rewarded for it			0.848		
Luck	Getting the job you want is mostly a matter of luck				0.840	
	In order to get a really good job you need to have family members or friends in high places				0.588	
Grievances	If employees are unhappy with a decision made by their boss, they should do something about it					0.889
	The main difference between people who make a lot of money and people who make a little money is luck					0.785

The grouping of variables is presented in the following figure Component Plot in Rotated Space which confirms the components were grouped as per the above rotated components table.

Figure 1 Component Plot in Rotated Space



t-test for equality of means of Job Satisfaction factors among Single Career and Dual Career couples in Madurai district

The respondents were subjected to several statements on various factors of Job Satisfaction and the responses were measured on a 5-point scale with 1 low level through 5 being high level. The following table reveals that the level of satisfaction of working couples is below the neutral level on almost all the factors of Job satisfaction. Though they are not satisfied on their job, it is also very much visible from the table that the single career couples have expressed more level of satisfaction on all the factors. However, to test the difference in level of response of respondents on the basis of their Career on various factors, separate t-tests were carried out and the results are appended in the following tables' 4 and Table 5.

H₀: The average level of satisfaction of Single and Dual career working couples in Madurai district are same on each factor of Job Satisfaction.

H₁: The average level of satisfaction of Single and Dual career working couples in Madurai district are not same on each factor of Job Satisfaction.

Table 4: Job Satisfaction – Singe/Dual Career vs. Factors

Job satisfaction Factors	Career			
	Single		Dual	
	Mean	SD	Mean	SD
Promotion	2.93	0.73	2.74	0.91
Confidence	2.51	0.50	2.20	0.71
Interpersonal	3.08	0.94	2.95	1.13
Rewards	2.80	0.93	2.56	1.16
Luck	2.92	0.78	2.77	0.99
Grievances	2.63	0.80	2.39	1.02

SD – Standard Deviation

Table .5: Independent Samples Test –

Equality of means among Single and Dual Career couples

Factor	Mean difference	Df	T	Sig.
Promotion	.188	998	3.535	.000
Confidence	.310	998	7.736	.000
Interpersonal relations	.129	998	1.919	.055
Rewards	.236	998	3.461	.001
Luck	.144	998	2.490	.013
Grievances	.239	998	3.998	.000

df – Degrees of Freedom; Sig. – Significance

It can be observed from the above table that the low values of t with a very large p-value (> .01) for the factors Interpersonal Relations and Luck verify that the corresponding null hypotheses of no difference in the average level of satisfaction of single and dual career

working couples in Madurai district is not rejected at 1 per cent level of significance. It may be concluded that the level of satisfaction on the factors Interpersonal Relations and Luck were same among single and dual career couples.

Also it can be noted that a large value of t and low values of p ($< .01$) for the factors Promotion, Confidence, Rewards and Grievances verify that the corresponding null hypotheses can be rejected and it is concluded that the level of satisfaction on the factors Promotion, Confidence, Rewards and Grievances are not same for the single career couples and dual career couples in Madurai district. It is very much evident from the above table that the level of satisfaction expressed by the single career couples is more than the dual career couples.

Findings

The job satisfaction of working couples has been found to have mainly five underlying components namely Promotion, Confidence, Interpersonal Relations, Reward, Luck and Grievances.

The differences in the level of satisfaction of single and dual career working couples on the factors of Interpersonal Relations and Luck were not statistically significant. However, the level of satisfaction on the factors Promotion, Confidence, Rewards and Grievances were not same for the single career couples and dual career couples; the level of satisfaction expressed by the single career couples is more than the dual career couples.

Conclusion and Future Research

On the basis of the finding, it is concluded that there is a need to eliminate stress since it has the impact on the performance of job satisfaction and factors of job satisfaction. Dual and single career couples in the organization have to be provided with job security, adequate pay and participation in decision making to enhance job satisfaction. Counselling sessions can be arranged to balance work life among Dual and single career couples. Policy measures of the organization have to be restructured to consider the wellbeing of working employees. This research can be further carried out among teachers and among nurses and doctors in hospitals and also among bank employees.

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Ecology in Science Fiction with Reference to Atwood's *The Year of the Flood*

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Abstract

Ecology is the study of organism in relation to their environment. Ecology explains the interconnectedness of man and the natural environment and therefore to study ecology and to study literature. It is essential to concentrate on the processes and relationships which govern the interacting of ideas, creatures, and environment. Science fiction is a genre of possibility, imagination and innovation whose popularity rises in relation to advances in science and technology. Its authors use real science fiction to create fictional stories that explore the possible future of mankind and the universe in a way that is both imaginative and realistic. Science fiction with an emphasis on nature and the environment, either on Earth or somewhere amongst the stars. The story is developed around a change in the environment—climate change, flooding, impact winter—that is usually seen as a threat to humans and our way of life. This paper expresses the ecological element intertwined with science fiction in Margaret Atwood's *The year of the flood*.

Keywords: ecology, ecocriticism, science fiction, environment etc.

Science fiction is the literature of the human species encountering change, and the literature of ideas and philosophy; it is multi- and interdisciplinary; and at its heart is a community of thinkers and creative's. Like the scientific method, science fiction provides an approach to understanding the universe we live in. It provides the tools, tropes, and cognitive framework within which we can explore ideas and safely run thought-experiments where we cannot or ought not in real-world experiments. By dramatizing such scenarios, populating them with believable characters, and providing the background necessary for the audience to willingly suspend disbelief, Science fiction brings ideas to life. Usually futuristic, Science Fiction speculates about alternative ways of life made possible by technological change, and hence has sometimes been called "Speculative fiction". Like fantasy, and often associated

with it, Science fiction envisions alternative worlds with believably consistent rules and structures, set apart somehow from the ordinary or familiar world of our time and place.

Ecology is the study of the interrelationships of living things to one another and their surrounding environment. Ecocriticism is its implicit congruence with the sciences that tell us about Earth's history, the relation of humans to other life forms, balances and disruptions in living systems. Ecocriticism is the study of literature and the environment from an interdisciplinary point of view, where scholars of literature analyze texts that illustrate environmental concerns and examine the various ways literature treats the subject of nature.

Ecocriticism distinguished itself by its commitment to the natural world as an important study rather than simply as an object of romantic study. Today ecology is defined as the way in which plants, animals and people are related to each other and to their environment. Science fiction with an emphasis on nature and the environment, either on Earth or somewhere amongst the stars. The story is developed around a change in the environment—climate change, flooding, impact winter—that is usually seen as a threat to humans and our way of life. These stories are often built around humanity's relationship with nature and so the setting of these stories is incredibly well developed. While writers will often take liberties there is usually some truth at the core of the story. Ecological or Environmental Science Fiction almost always deals with a change in the environment.

Science Fiction explores issues surrounding how humanity deals with change. Environmental change affects humanity in a very real and potentially radical way, which has powerful social implications. Studying science fiction from an ecocritical standpoint offers a productive, interesting and relevant way to analyze how nature and environments are represented in this genre, while providing insight on the workings of science fiction itself.

Margaret Atwood is a prolific Canadian writer, who has penned several books in varied genres. Atwood's *The Year of the Flood* falls in the category of speculative fiction. *The Year of the Flood* unifies three main different kinds of literary aspects science fiction, postmodernism and ecocriticism with their subtitles constituting a rhizomatic content.

Showing science and technology used for anthropocentric aims as the cause of all catastrophes, the novel constitutes its introductory part and finds the answer of ‘why’ question via science fiction. Then, composed by postmodern technique, it gives a kind of development to the work and all the postmodern attempts correspond to ‘how’ question examining the plurality, multiplicity and the unity of differences, and it gives a kind of salvation and suggests ecocritical ways in all parts of life as a conclusion.

Atwood’s choice of setting is carefully designed to emphasize certain trends in our current world, showing how they could evolve in the future, and therefore evaluating our current choices and activities. The novel achieves to compound science fiction reversing the reality notion creating a nonexistent world order with postmodern narrative techniques and its multiple reality approach, and suggests an ecocritical way of life as the salvation of mankind.

There is plethora of themes with which this novel deals, such as Christian values, ecosystem, animal abuse, vegetarianism, violence and sexuality but above all this novel has a vital issue to discuss namely ecological imbalance created by human beings for their vested interests. The novel is a well-knit, gripping, chilling-an uncomfortably believable account of a post apocalyptic world where humankind has engineered its own doom as well as the destruction of the whole of its environment just for the sake of material gains. So this is the main aim of presenting this research paper on Atwood to analyse her fiction work from the lens of ecocritical theory.

Margaret Atwood, the renowned Canadian poet and novelist describes an author’s work in the present age as making an attempt to warn the world against destruction of ecological relations in such a way that it might result in the disappearance of life from the face of the earth. Atwood has used the image of a tent to write about an author’s responsibility to reflect the vulnerability of human beings.

Margaret Atwood in the very beginning of her novel reveals the pathetic state of our environment, she claims that now earth is not a live able place. The waterless flood has engulfed everything and destroyed everyone and it appears that only two humans survive, both female: Ren, a young sex club worker and trapeze artist, and Toby, a God’s Gardner---a

member of a religious group devoted to preserving the environment. God's Gardeners try to lead a natural way of life. The God's Gardeners, found by Adam One describing them as a plural Noah feeling the symptoms of the disaster (the waterless flood), is a nature oriented religious sect growing vegetables and bees, which Toby delivers the news to them every morning on the rooftops. They try to cure anthropocentric damages in the universe by trying to live in harmony with nature, and live in a simplest and quite literally life style. At surface level *The Year of the Flood* seems a very simple story of the sufferings of these two female characters but on deeper level one can easily feel the global issues raised by the author. Like Atwood's other speculative novels has to interrogates our understanding of the natural and artificial and it is also interested in the relationship between technology and philosophy, between science and religion.

Adam One's ecological revision of the biblical myth of the fall may seem pessimistic – although perhaps it can be redeemed as a fortunate fall – but its pessimism is offset, at a higher level, by its comic humour:

According to Adam One, the fall of man was multi-dimensional. The ancestral primates fell out of the trees; then they fell from vegetarianism into meat-eating. Then they fell from instinct into reason, and thus into technology; from simple signals into complex grammar, and thus into humanity; from firelessness into fire, and thence into weaponry; and from seasonal mating into an incessant sexual twitching. Then they fell from a joyous life in the moment into the anxious contemplation of a vanished past and the distant future.

The Fall was ongoing, but its trajectory led ever downward.

Sucked into the well of knowledge, you could only plummet,

learning more and more, but not getting any happier. (2010: 224)

Adam One's revising of the myth of the fall is an anti-type to the biblical myth of the fall, and although it may seem comical, it also contains profound truths. It at once reaffirms and radically reinterprets the biblical myth of the fall in terms of modern science. The God's gardeners are not anti-science but fuse science and religion in their eco-theology, even though the results are often ludicrous, for instance, their debate on why God gave humans canine

teeth if He meant them to be vegetarian.

God's Gardeners interpret the virus that destroys most of humanity as the Waterless Flood, thus treating it as an anti-type to the original Flood myth, retaining the original's pessimistic view of human nature:

I will never again curse the ground because of man, for the imagination of man's heart is evil from his youth; neither will I ever again destroy every living creature as I have done (Genesis 8: 21).

The modern chaotic life where we find imbalance in the ratio of male and female, plants and men, water and space is the root cause of degeneration of modern culture and literature also. This imbalance came into existence due to loss of deep ethical values towards nature.

When the reader comes across with *The Year of the Flood* title, she expects an aquatic flood intrinsically because the flood becomes only with water in the world. However, Atwood uses her wit shockingly and creates a 'Waterless Flood' which means a pandemic sickness rushing through the Gardener's world. It is strange to the reader because it breaks down the universal consensus on how a flood occurs. Similar to many of Atwood's other work, *The Year of the Flood* make ecologically focused criticisms of the relationship between humans, animals and the environment. The novel raises questions about the eventual outcome of genetic modification of crops and animals as well as the ethics of these practices.

Atwood tries to realize us that earth is considered as mother earth and the special power of production and reproduction is given to it similarly almighty God has bestowed this special power of reproduction to female gender. Atwood and her female characters in this novel are more concerned about the environmental degeneration than their male counterparts. Atwood seeks to posit a world where both ecology and human existence face grave danger.

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