Empirical Dialogue on Dysnomia

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Abstract*:*

The present article provides empirical evidence on awareness of secondary school teachers on Dysnomia in Upper Subansiri District of Arunachal Pradesh. The study reveals that there is no significant difference in the awareness of secondary school teachers towards Dysnomia with regard to gender, age, management, educational qualification, teaching experience and marital status. Teachers have to attend actively in orientation programmes, workshops and symposium for acquiring vocabulary and competencies to deal children with Dysnomia in teaching learning process. Teachers have to be well informed with latest techniques and technologies through in-service teacher education programmes for teaching to Dysnomic children. Participatory research is necessary to the teachers in the field of specific learning disabilities, so that the teachers can develop intervention programmes for better progress of Dysnomic children in their academic and real life style.

Key words: *Dysnomia, Secondary School Teachers and Awareness*

Introduction:

Education not only provides literacy and numeracy skills to an individual, but also life skills. It is the key to create, store disseminate and manage knowledge. Secondary education is bridge between primary and higher education. In secondary education, the teacher has to perform multi-faceted roles. He/she should not only teach students but also observe the specific learning difficulties of the students and provide intervention strategies to overcome such difficulties during class. It is evident that 3-6% of students have been suffering from Dysnomia (Warburton, 2000; Yorkton, 1980). It is a difficulty or inability to retrieve the correct word from memory when it is needed. It is one of the types of memory disorder where people sometimes face difficulty in recalling words or names (Marini, 2011; Robert,1998).

At school level, children with Dysnomia often have an auditory memory problem means they are not able to remember what they hear and sometimes have a problem with remembering what they see or experience (Wolf, 2000). There are certain biological, sociological, cultural and psychological factors that affect Dysnomia. It is often used to refer to individuals who have naming or word-retrieval difficulties. Students with Dysnomia are mastering the art of 'circumlocution' which becomes extremely important (Basso, 2010; Cotelli, 2012; Davidson, 2003). Circumlocution is the act of describing many features of on object, event, or action without saying the exact word for the object, event, or action. Dysnomia is usually caused by a stroke or brain injury with damage to one or more parts of the brain that deals with language. It also causes due to low blood pressure, hyperthermia,

brain damages, electrolyte imbalance and alcohol intoxication(Goodglass, 1972; Loban, 1966).

Dysnomia consists of Word Selection Dysnomia, Semantic Dysnomia and Disconnection Dysnomia. There is no method available to completely cure Dysnomia. However, there are treatments to help improve word-finding skills. Circumlocution Induced Naming Therapy (CIN) helps for better in semantics and phonology for students with Dysnomia. Computerized- assisted therapy (CAT), Visual Communication Therapy (VCT), Visual Action Therapy (VAT), Functional Communication Treatment (FCT) and Melodic Intonation Therapy (MIT) helpful to treat students with Dysnmia(Wolf, 2000).

Rationale of the Study:

Research has documented that children with Dysnomia may display language deficits, retrieving difficulties and decreasing in verbal fluency (Wiig, 1977). According to Wolf and Goodglass (1986), retrieval difficulties include visible perceptual deficits, vocational deficits, memory problems and rate difficulties. The rapid naming task requires co-ordination of attention, perceptual, conceptual, memory, lexical, and articulatory sub processes. Furthermore, Dsynomia frequently coincides with reading impairments (Denkla, 1976; Wolf & Good glass, 1986). Sometimes, Dysnomia associates with other related deficits namely Dysgraphia, Dysphasia, Dyscalculia, Dyspraxia and Attention Deficit and Hyperactivity Disorder (ADHD) (McCrory, 2004). In Arunachal Pradesh, secondary school teachers need to have awareness on Dysnomia with a view to provide proper strategies to deal student with Dysnomia. There are very few researches conducted related to awareness on Dysnomia in India and Abroad. Keeping in view the significance of awareness on Dysnomia, the investigator has made an attempt to study awareness on Dysnomia in the context of Arunachal Pradesh. Hence, the researcher has stated the problem as: *Awareness on Dysnomia among Secondary School Teachers in Upper Subansiri District of Arunachal Pradesh.*

Objectives of the Study:

In the present study, on the basis of the nature of the research problem, the investigator has formulated the following objectives.

1. To find out awareness level on Dysnomia among secondary school teachers at Upper Subansiri District of Arunachal Pradesh.
2. To find out significant difference in awareness on Dysnomia among secondary school teachers with regard to gender.
3. To find out significant differences if any, in awareness on Dysnomia among secondary school teachers with regard to age.
4. To find out significant differences if any, in awareness on Dysnomia among secondary school teachers with regard to management.
5. To find out significant differences if any, in awareness on Dysnomia among secondary school teachers with regard to educational qualification.
6. To find out significant differences if any, in awareness on Dysnomia among secondary school teachers with regard to teaching experience.

7. To find out significant differences if any, in awareness on Dysnomia among secondary school teachers with regard to marital status.

Hypotheses of the Study:

1. There is no significant difference in awareness on Dysnomia among secondary school teachers with regard to gender.
2. There is no significant difference in awareness on Dysnomia among secondary school teachers with regard to age.
3. There is no significant difference in awareness on Dysnomia among secondary school teachers with regard to management.
4. There is no significant difference in awareness on Dysnomia among secondary school teachers with regard to educational qualification.
5. There is no significant difference in awareness on Dysnomia among secondary school teachers with regard to teaching experience.
6. There is no significant difference in awareness on Dysnomia among secondary school teachers with regard to marital status.

Methodology of the Study:

Method: The present study is descriptive in nature. So, the investigator has adopted the survey method to collect the data. It helps to predict the results based on collected information.

Population and Sample: The secondary schools teachers belonging to both government and private schools of Upper Subansiri district of Arunachal Pradesh were considered as population. The sample of the study was 100 secondary school teachers of Upper Subansiri district of Arunachal Pradesh. This sample was adopted using Stratified Random Sampling Technique.

Table-1: Demographic characteristics of Sample:

Category	**Secondary School Teachers(**100)	
Gender	Male (40)	Female (60)
Age	Below 30 Years (63)	Above 30 Years (37)
Management	Government (45)	Private (55)
Educational Qualification	Under Graduate (30)	Post Graduate (70)
Teaching Experience	Below 10 Years (65)	Above 10 Years (35)
Marital Status	Married (41)	Unmarried (59)

Tool used in the study: The investigator developed an awareness test as a tool for data collection. Procedure for construction of test was followed as per construction and development of the achievement test. It contained 50 items. Items were made in the form of multiple choices, true/false, filling the blanks and very short answers. It includes items related to five dimensions, namely 1. Concept, 2. Characteristics, 3. Causes, 4. Assessment and 5. Strategies. Distribution of questions was followed as given below.

Table-2: Showing distribution of items in final draft of awareness test.

SL.No.	Dimensions of Dysnoma	No. of Items
1	Concept	10
2	Characteristics	10
3	Causes	10
4	Assessment	10
5	Strategies	10

Reliability and Validity are the two important characteristics of any test. Therefore, the investigator has taken consideration for establishing the reliability and validity of awareness test. For computing the reliability of the test, the investigator used the Split-Half Method. The co-efficient of reliability (rtt) came out as 0.84, which indicates a quite high amount of reliability of the test. The content validity was ensured by considering of the opinions of the content experts. All the teachers attempted the test with full care and interest.

For administering the test, the investigator took every care so that the teachers are not to find any difficulty in attempting the tool of the study. Awareness test was administered on the teachers and the investigator visited the selected schools personally. The instructions relating to the awareness test was explained to the teachers by the investigator. The procedure for attempting the scale was also explained in brief. Furthermore, the teachers were asked to follow the instructions given and attempt all the questions of the scale within 30 minutes as it is found sufficient for the teachers to complete the test. As per the directions and requirements of the scale, teachers completed the test within the stipulated duration.

Statistical techniques used: By using Mean ± 0.5 sigma, Low Level, Moderate Level & High Level awareness of Dysnomia was classified. t-test was applied to test the significant difference in awareness on Dysnomia among secondary school teachers.

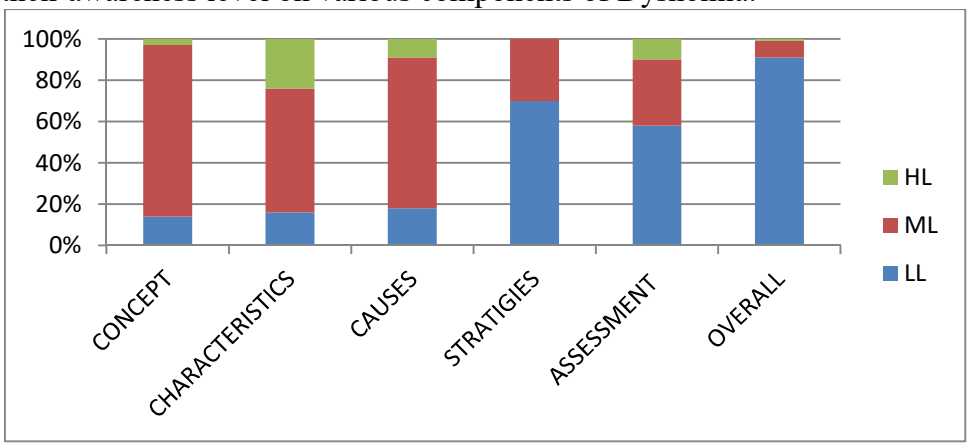
Results and Discussion*:*

Objective-1: To find out awareness level on Dysnomia among secondary school teachers at Upper Subansiri District of Arunachal Pradesh.

Table-3: *Showing awareness level on Dysnomia among secondary school teachers at Upper Subansiri District of Arunachal Pradesh.*

Sl. No.	Dimensions of Dysnomia	Low Level N	%	Moderate Level N	%	High Level N	%
1	Concept	14	14	83	83	3	3
2	Characteristics	16	16	60	60	24	24
3	Causes	18	18	73	73	9	9
4	Strategies	70	70	30	30	0	0
5	Assessment	58	58	32	32	10	10
6	Overall Awareness Level	91	91	8	8	1	1

Figure-1: Showing Bar Diagram of distribution of respondents as per their awareness level on various components of Dysnomia.



1. Concept of Dysnomia: Majority of teachers (83%) were under the category of Moderate Level (ML), followed by (14%) of teachers in Low Level (LL) category and about (3%) of them were in High Level (HL) of awareness on concept of Dysnomia.

2. Characteristics of Dysnomia: Majority of responding teachers (60%) were under the category of Moderate Level (ML), followed by (16%) of teachers were in Low Level (LL) category and about (24%) of them were in High Level (HL) of awareness on characteristics of Dysnomia.

3. Causes of Dysnomia: Majority of teachers (73%) were under the category of Moderate Level (ML), followed by (18%) of teachers were in Low Level (LL) category and only (9%) of them were in High Level (HL) of awareness on causes of Dysnomia.

4. Strategies for Dysnomia: Majority of responding teachers (70%) were under the category of Low Level (LL), followed by (30%) of teachers were in Moderate Level (ML) category and no respondent had High Level (HL) of awareness on strategies of Dysnomia.

5. Assessment of Dysnomia: Majority of teachers (58%) were under the category of Low Level (LL), followed by (32%) of them were in Moderate Level awareness, and only (10%) respondents were in High Level (HL) of awareness on assessment of Dysnomia.

6. Overall Awareness on Dysnomia: Majority of respondents (91%) were in Low Level (LL) awareness on Dysnomia in general, followed by (8%) of them were in Moderate Level (ML) awareness, and only (1%) respondents were in High Level (HL) of awareness on Dysnomia.

Objective-2: To find out significant difference in awareness on Dysnomia among secondary school teachers with regard to gender.

Hypothesis-1: There is no significant difference in awareness on Dysnomia among secondary school teachers with regard to gender.

Table-4: Showing M, SD & t-value scores of awareness of secondary school teachers towards Dysnomia with regard to gender.

Dimensions of Dysnomia	Gender				t-values
	Male N1=60		Female N2=40		
	Mean	SD	Mean	SD	
1. Concept	4.27	1.37	5.23	1.30	@ 2.52
2. Characteristics	7.75	2.79	8.58	2.47	@ 1.56
3. Causes	4.45	1.50	9.55	2.02	@ 2.16
4. Strategies	2.67	1.24	2.43	1.54	@ 1.00
5. Assessment	0.67	0.76	0.78	0.71	@ 0.73
6. Overall Awareness	19.63	4.95	22.61	5.44	@ 2.57

(Note: @=Not Significant)

Figure-2: Showing Bar Diagram of Mean and SD distribution gender-wiseon various dimensions of Dysnomia**.**

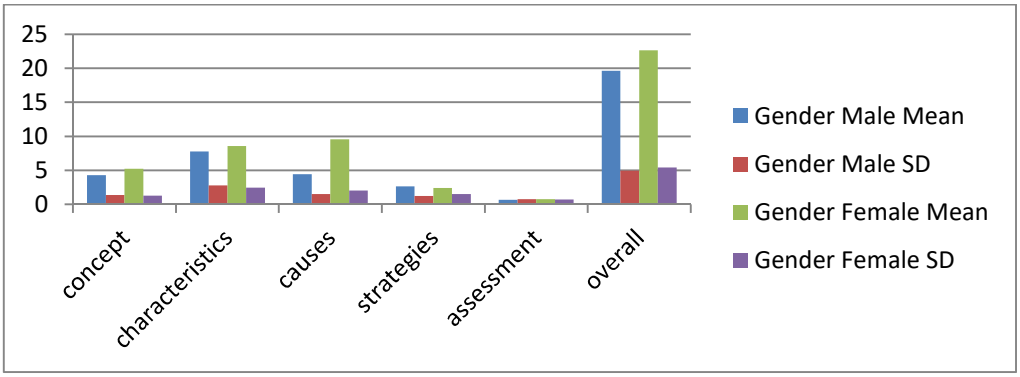


Table-4 shows that the t-values with respect to concept (2.52), characteristics (1.56), causes (2.16), strategies (1.00) and assessment (0.73) are not significant at 0.01 level. It indicates that there is no significant difference between male and female teachers in their awareness towards Dysnomia with respect to said dimensions. As whole, t-value (2.57) is not significant at 0.01 level. Hence, the null hypothesis is accepted. It is clear that there is no significant difference in the awareness of secondary school teachers towards Dysnomia with regard to gender. From the mean values, it is clear that male teachers with regard to concept (M: 4.27), characteristics (M:7.75), and assessment (M:0.67) are very slightly lower than female teachers with respect to concept (M:5.23), characteristics (M:8.58) and assessment (M:0.78) whereas female teachers with regard to causes (M:9.55) and strategies (M:2.67) is higher than the male teachers with regard to causes (M:4.45) and strategies (M:2.43).

Objective-3: To find out significant difference in awareness on Dysnomia among secondary School Teachers with regard to Age.

Hypothesis-2: There is no significant difference in awareness on Dysnomia among secondary School Teachers with regard to Age.

Table-5: Showing Mean, SD and t-values scores of dimensions of Dysnomia with regard to age.

Dimensions of Dysnomia	**Age**				**t-values**
	Below 30 years (N1=63)		**30 years and Above (N2=37)**		
	Mean	**SD**	**Mean**	**SD**	
1. Concept	5.20	1.34	4.24	1.32	@ 2.50
2. Characteristics	8.60	2.61	7.86	2.58	@ 1.45
3. Causes	5.07	1.85	4.64	1.49	@ 1.30
4. Strategies	2.93	1.54	2.35	0.99	@ 2.63
5. Assessment	0.80	0.66	0.59	1.08	@ 1.23
6. Overall Awareness Level	22.36	5.45	19.54	4.12	@ 2.37

(Note: @= Not Significant).

Figure-3: Showing Bar Diagram of Mean and SD distribution age-wise on various dimensions of Dysnomia**.**

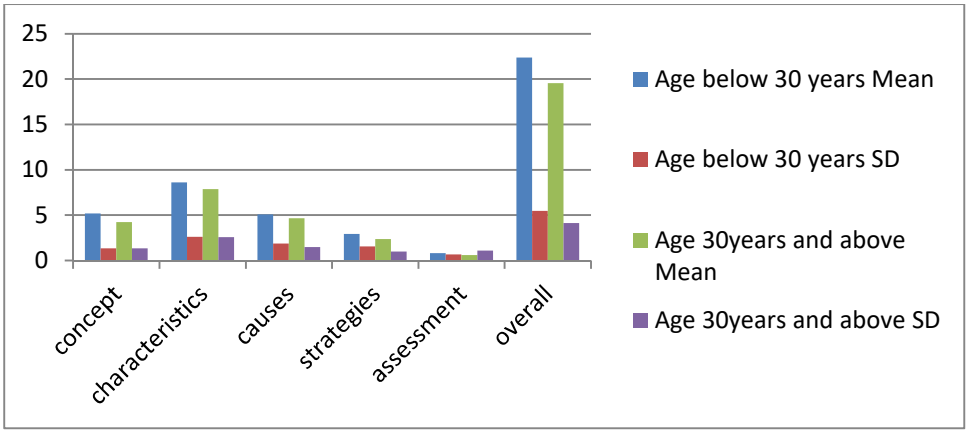


Table-5 shows that the t-values with respect to concept (2.50), characteristic (1.45), causes (1.30), strategies (2.63) and assessment (1.23) are not significant at 0.01 level. Thus, it is evident that there is no significant difference between teachers of age below 30 years and 30 years & above in their awareness towards Dysnomia with respect to said dimensions. The overall t- value (2.37) is not significant at 0.01 level. Hence, null hypothesis is accepted. It is clear that there is no significant difference in the awareness of secondary school teachers towards Dysnomia with regard to age. From the mean values, it is clear that those teachers with age below 30 years with regard to concept (M: 5.20), characteristic (M: 8.60), causes (M: 5.07) and strategies (M: 2.93) are very slightly higher than the teachers with age group 30 years & above with respect to concept (M: 4.24), characteristic (M: 7.86), causes (M: 4.64) and strategies (M: 2.35), whereas teachers of age 30 years& above with regard to assessment (M: 0.59) are slightly lower than teachers of age group below 30 years with respect to assessment (M: 0.80).

Objective-4: To find out significant differences if any, in awareness on Dysnomia among secondary School Teachers with regard to management.

Hypothesis-3: There is no significant difference in awareness on Dysnomia among secondary School teachers with regard to management.

Table-6: Showing Mean, SD and t-values scores of dimensions of Dysnomia with regard to management.

Dimensions of Dysnomia	**Management**				**t-value**
	Government (N1=45)		**Private (N2=55)**		
	Mean	**SD**	**Mean**	**SD**	
1. Concept	4.40	1.38	5.21	1.32	@ 3.00
2.Characteristics	7.67	2.49	8.76	2.65	@ 2.18
3. Causes	4.97	1.78	4.63	1.65	@ 1.03
4. Strategies	2.50	1.20	2.76	1.55	@ 1.00

5. Assessment	0.73	0.80	0.80	0.89	@ 0.50
6 Overall Awareness Level	20.15	4.75	22.18	5.34	@ 2.03

Note: @= Not Significant).

Figure-4: Showing Bar Diagram of Mean and SD distribution management-wise on various dimensions of Dysnomia.

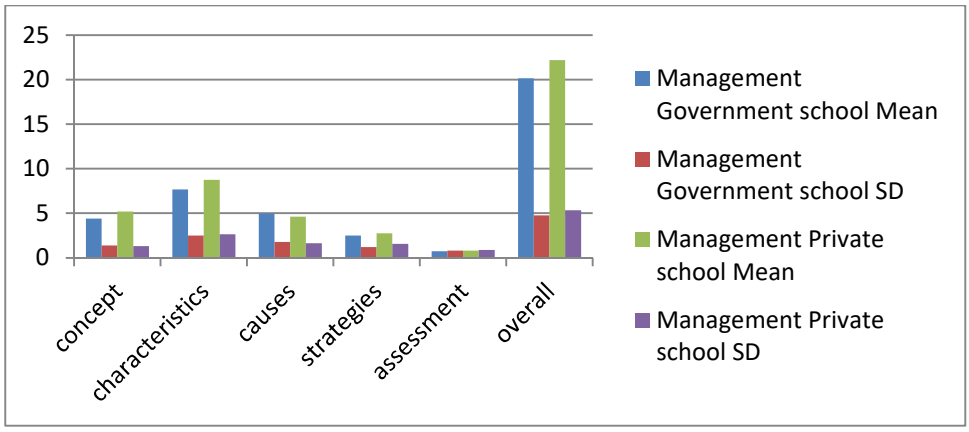


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Table-6 shows that the t-values with respect to characteristics (2.18), causes (1.03), strategies (1.00), assessment (0.50) are not significant at 0.01 level except concept (3.00). It indicates that there is no significant difference between government and private school teachers in their awareness towards Dysnomia with respect to said dimensions except concept. As whole, t-value (2.03) is not significant at 0.01 level. Hence, the null hypothesis is accepted. Thus, it is clear that there is no significant difference in the awareness of secondary school teachers towards Dysnomia with regard to management. From the mean values, it is clear that the private school teachers with regard to concept (M: 5.21), characteristics (M: 8.76), strategies (M: 2.76) and assessment (0.80) are higher than the government school teachers with regard to concept (M: 4.40), characteristics (M: 4.97), strategies (M: 2.50) and assessment (0.73). Again, it is clear that private school teachers with respect to causes (M: 4.63) are slightly higher than the government school teachers (4.97).

Objective-5: To find out significant differences if any, in awareness on Dysnomia among secondary School Teachers with regard to educational qualification.

Hypothesis-4: There is no significant difference in awareness on Dysnomia among Secondary School Teachers with regard to educational qualification.

Table-7: Showing Mean, SD and t-values scores of dimensions of Dysnomia with regard to educational qualification.

Dimensions of Dysnomia	Educational Qualification				t-value
	U G (N1=30)		PG (N2=70)		
	Mean	SD	Mean	SD	
1. Concept	4.93	1.11	4.81	1.52	@ 0.46
2. Characteristics	8.26	2.57	8.18	2.67	@ 0.14
3. Causes	4.30	1.51	5.17	2.01	@ 2.55
4. Strategies	2.63	1.27	2.58	1.50	@ 0.17
5. Assessment	0.56	0.67	0.81	0.76	@ 2.50
6. Overall Awareness Level	20.70	4.77	21.57	5.34	@ 0.81

Note: @ = Not Significant

Figure 5-Showing bar diagram of Mean and SD distribution educational qualification-wise on various dimensions of Dysnomia.

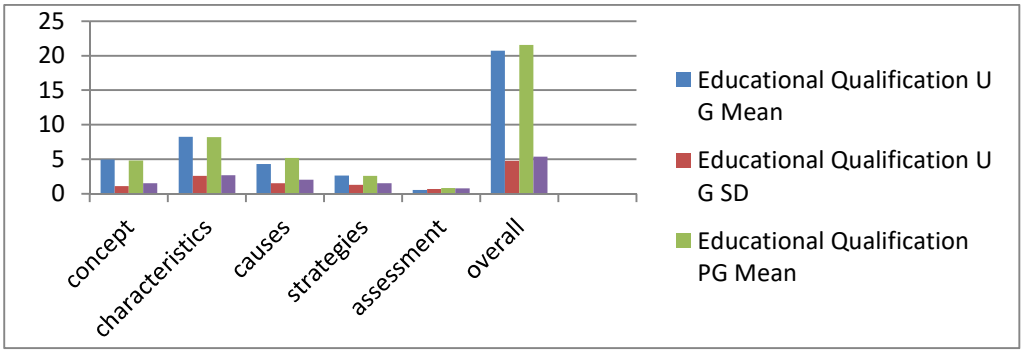

Table-7 reveals that the t-values with respect to concept (0.46), characteristics (0.14), causes (2.55), strategies (0.17) and assessment (2.50) are not significant at 0.01 level. It shows that there is no difference in the awareness of secondary school teachers with UG and PG qualification towards Dysnomia. As whole, t- value (0.81) is not significant at 0.01 level. Hence, the null hypothesis is accepted. It is clear that there is no significant difference in the awareness of secondary school teachers towards Dysnomia due to variation in educational qualification. From the mean values, it is clear that secondary school teachers with UG background with respect to concept (M: 4.93) characteristics (M: 8.26) and causes (M: 4.30) are slightly less than teachers with PG background respect to concept (M: 4.81) characteristics (M: 8.18) and causes (M: 5.17). But, teachers with UG background with respect to strategies (M: 2.63) and assessment (0.56) are slightly higher than the teachers with PG background with respect to strategies (M: 2.58) and assessment (0.81).

Objective-6: To find out significant differences if any, in awareness on Dysnomia among secondary School teachers with regard to teaching experience.

Hypothesis-5: There is no significant difference in awareness on Dysnomia among secondary School teachers with regard to teaching experience.

Table-8: Showing Mean, SD and t-values scores of dimensions of Dysnomia with regard to teaching experience.

Dimensions of Dysnomia	Teaching Experience				t-value
	10 years and below (N1=65)		Above 10 years (N2= 35)		
	Mean	SD	Mean	SD	
1. Concept	5.06	1.28	4.45	1.55	@ 2.17
2. Characteristics	8.36	2.52	7.71	2.92	@ 1.14
3. Causes	4.89	1.86	5.14	2.15	@ 0.59
4. Strategies	2.53	1.46	2.62	1.33	@ 0.32
5. Assessment	0.75	0.70	0.65	0.76	@ 1.00
6. Overall Awareness Level	21.61	5.01	20.60	5.48	@ 0.91

Note: @= Not Significant

Figure-6: Showing bar diagram of Mean and SD distribution teaching experience-wise on various dimensions of Dysnomia.

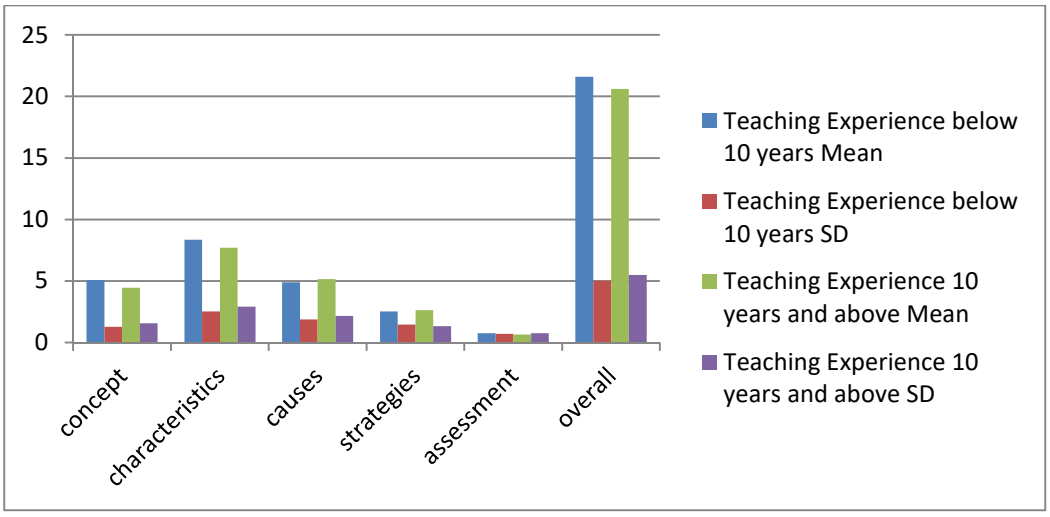

Table-8 shows that the t-value with respect to concept (2.17), characteristics (1.14), causes (0.59), strategies (0.32), assessment (1.00) are not significant at 0.01 level. It indicates that there is no significant difference between secondary school teachers with teaching experience of below 10 years and above 10 years in their awareness towards Dysnomia with respect to said dimensions. As whole, t-value (0.91) is not significant at 0.01 level. Hence, the null hypothesis is accepted. It is evident that there is no significant difference in the awareness of secondary school teachers towards Dysnomia with regard to teaching experience. From the mean values, it is clear that secondary school teachers with teaching experience below 10 years with respect to concept (M: 5.06), characteristics (M:8.36), and assessment (M:0.75) are slightly higher than the secondary school teachers with teaching experience 10 years and above with respect to concept (M: 4.45), characteristics (M: 7.71), and assessment (M: 0.65) teaching above 10 years. But, the secondary school teachers with teaching experience below 10 years with respect to causes (M:4.89) and strategies (M:2.53)

lower than the secondary school teachers with teaching experience 10 years and above with respect to causes (M: 5.14) and strategies (M: 2.62).

Objective-7: To find out significant differences if any, in awareness on Dysnomia among secondary school teachers with regard to marital status.

Hypothesis-6: There is no significant difference in awareness on Dysnomia among secondary school teachers with regard to marital status.

Table 4.7-Showing Mean, SD and t-values scores of dimensions of Dysnomia with regard to marital status.

Dimensions of Dysnomia	Marital Status				t-value
	Unmarried (N1=59)		Married (N2=41)		
	Mean	SD	Mean	SD	
1. Concept	5.00	1.49	4.63	1.26	@ 1.54
2. Characteristics	8.38	2.47	8.07	2.78	@ 0.59
3. Causes	5.01	1.96	4.63	1.69	@ 1.05
4. Strategies	2.89	1.56	2.17	1.07	@ 3.00
5. Assessment	0.84	0.76	0.58	0.77	@ 2.60
6. Overall Awareness Level	22.15	5.40	20.09	4.60	@ 2.01

Note: @ = Not Significant

Figure-7: Showing bar diagram of Mean and SD distribution marital status-wise on various dimensions of Dysnomia.

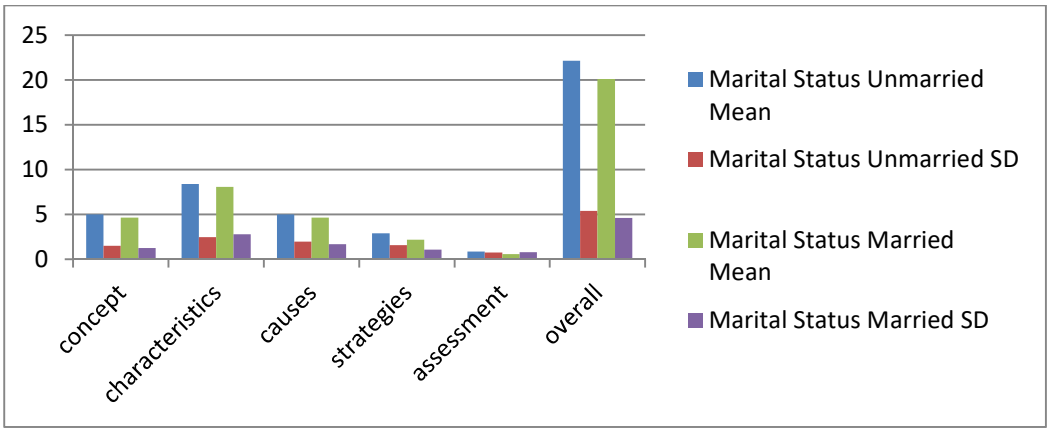

Table-9 shows that the t-value with respect to concept (1.54), characteristics (0.59), causes (1.05), strategies (3.00) and assessment (2.6) at critical value are not significant at 0.01 level. Thus, it indicates that there is no significant difference between married and unmarried secondary school teachers in their awareness towards Dysnomia with respect to said dimensions. The overall, t-value (2.01) is not significant at 0.01 level. Hence, the null hypothesis is accepted. It is evident that there is no significant difference in the awareness of secondary school teachers towards Dysnomia with regard to Marital Status. From the mean values, it is clear that the unmarried teachers with respect to concept (M: 5.00),

characteristics (M: 8.38), causes (M: 5.01), strategies (M: 2.89) and assessment (M: 0.84) are higher than the married teachers with respect to concept (M: 4.63), characteristics (M: 8.07), causes (M: 4.63), strategies (M: 2.17) and assessment (M: 0.58).

Educational Implications:

Teachers who are successful in educating children with Dysnomia are using many strategies. They begin by identifying the problems faced by the child. The teachers select different educational practices associated with language testing, memory testing, speech testing and rapid naming object to overcome the problems of word finding or word retrieval in children.

- Extensive testing of grammatical function should be given priority.
- Extensive testing of assessment of spontaneous language should be conducted.
- Testing of inflectional morphology, ability to produce grammatical structures.
- Testing of syntactic comprehensive and grammatical judgment can be preferred to enhance the vocabulary.
- Appropriate learning aids such as verbal and imaging test can be used in teaching –learning process.
- Proper lesion mapping and speech repetition tests are to be conducted to enlarge the memory power of the children.

Conclusion:

Teachers have to attend actively in orientation programmes, workshops and symposium for acquiring vocabulary and competencies to deal children with Dysnomia in teaching learning process. Teachers have to be well informed with latest techniques and technologies through in-service teacher education programmes for teaching to Dysnomic children. Participatory research is necessary to the teachers in the field of specific learning disabilities, so that the teachers can develop intervention programmes for better progress of Dysnomic children in their academic and real life style. NCERT, NCTE. NIEPA and CASE have to take initiation to conduct various seminars/ conferences and refresh courses to bring awareness and attitudinal change among the teachers.

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