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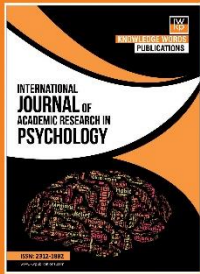
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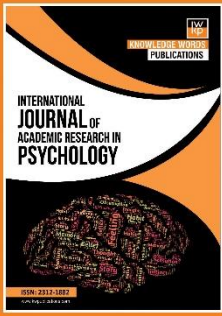


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Stress and Depression in Destitute and Normal Females

Anita Sharma

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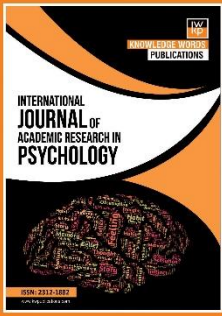
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INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PSYCHOLOGY



Stress and Depression in Destitute and Normal Females

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Abstract

The present study was aimed to explore the significance of differences if any between normal and destitute married females on their stress and depression levels. The females (35 normal and 35 destitute) were assessed on stress and depression by using ICMR Psychological stress questionnaire (Srivastava, 1991-92) and Beck depression inventory (1994). Data were analysed by using quantitative and qualitative analysis. Results have revealed the significant differences between normal and destitute females on stress ($t=49.29^{**}$, $P<.01$) and depression ($t=50.20^{**}$, $P<.01$) i.e. destitute females have reported significantly higher level on stress and depression than normal females. Case studies have further authenticated the results. Overall, results indicate a great need to provide social, emotional and financial support to destitute females to promote their overall well-being and mental health by giving insight into their problems.

Keywords: Destitution, Destitute Females, Stress and Depression.

Introduction

Destitution describes lacking the means to meet the basic needs of shelter, warmth, food, water, and health. Destitution has become the term commonly used to refer the poverty experienced by asylum seeker and who without social emotional and financial support.

Destitution has become a serious offshoot of family problems in India. Women seem to be always at the receiving end of broken families. This phenomenon shows up not only in the economically backward families but in the well-off ones as well. The studies indicate that it was mostly against their will that women are resorting to the extreme step of taking shelter in some destitute home.

Destitute woman refers to a female without adequate support who is widowed, abandoned or left alone without care. "Destitute" in relation to a woman and widow means any female who has no independent source of livelihood or is not being looked after by any family member or relative and includes a divorced woman.

Destitution of women is found to be due to several social disadvantages that either reflect pre-existing ones or are the consequence of serious problems with cognition, affect, and behaviour in our society. Pre-existing disadvantages include poor education, living conditions and family relationships, specifically oppression, violence, sexual abuse,

subordination and devaluation inherent in patriarchal oppression. As Bachrach (1988) stresses, women typically experience a variety of social disadvantages as a consequence of social oppression that contributes to their social disablement. Other social disadvantages may be seen as a consequence of the problems themselves: poverty, homelessness, stigmatization, exclusion from many aspects of 'normal life' and disrupted family and social networks all of which make destitute women marginalized and render them powerless. Personality disorders, sexual dysfunctions, and other types of maladjustment are also seen to be the reasons for destitution. Such psychological problems have been viewed as a product of oppression. The stress imposed by oppression can, and undoubtedly does, precipitate socially disabling disorders of cognition, affect, and behaviour. It was found that stress & depression were positively correlated for homeless women who also suffered from the problems taking place in families (Ayerst & Sandra, 1999).

Stress is an important issue and is growing rapidly in every facet of life. Now-a-days studies on stress are very essential in order to know its relation with relevant organizational factors responsible for productivity and performance. Stress is something which makes one feels uncomfortable. It creates imbalance and individual makes an effort to restore the state of balance.

Stress is the wear and tear. Our bodies experience as we adjust to our continually changing environment; it has physical and emotional effects on us and can create positive or negative feelings. As a positive influence, stress can help compel us to action; it can result in a new awareness and an existing new perspective. As a negative influence, it can result in feelings of distrust, rejection, anger and depression, which in turn can lead to health problems such as headaches, upset, stomach rashes, insomnia, ulcers, high blood pressure, heart disease and stroke.

The term stress has been defined variously by different psychologists. Selye (1974) says: "Stress is the non-specific response of body to any demand made on it". Black defined, "Stress refers to any force which physically or psychologically strains the coping mechanism of an organism". Ivan & Matterson defined stress as "An adaptive response mediated by individual differences or psychological processes that is consequences of any external action, situation or event that places excessive psychological and physical demand upon a person". Robins defined stress as "A dynamic condition in which an individual is confronted with an opportunity, constrained or demand related to what he desires and for the outcome is perceived to be both uncertain and important".

The term depression covers a variety of negative moods and behavior changes. Some are normal mood fluctuations and other meet the definition of clinical problems. The mood change may be temporary or long-lasting. It may range from a relatively minor feeling of melancholy to a deep negative view of the world and an inability to function effectively.

Depression is an emotional state marked by great sadness and apprehension feelings of worthless and guilt, withdrawal from others, loss of sleep, appetite and sexual desire or less of interest and pleasure in usual activities.

There is some variation in the symptoms and signs of depression across the life span. Depression in children sometimes results in their being overly active and aggressive; in adolescents, it is sometimes manifested by negativism, antisocial behavior and a feeling of being misunderstood and in order adults, depression is often characterized by distractibility and memory loss. Furthermore, an individual seldom shows all the aspects of depression: the diagnosis is typically made if at least a few signs are evident, particularly a mood of profound

sadness that is out of proportion to the person's life situation and a loss of interest and pleasure in previously enjoyable activities.

Major depression is one of the most widespread of the disorders, with a life-time prevalence rate of between 4 and 5 percent (Weissman et al., 1988). The average age of onset is between forty and fifty and it is most common in women than in men. It is also more frequent among members of the lower socioeconomic classes (Hirschfeld and Cross, 1982).

Objectives

- To observe the level of stress in normal females.
- To observe the level of stress in destitute females.
- To observe the level of depression in normal females.
- To observe the level of depression in destitute females.
- To find out the significance of difference between the normal and destitute females on stress and depression levels.

Hypotheses

- There will be a significant difference between normal and destitute females on their stress level.
- There will be a significant difference between normal and destitute females on their depression level.

Method

Sample

The sample for this study consisted of 70 subjects (married females) out of which 35 were normal females and 35 were destitute females. The sample was selected through purposive sampling from Shimla city and Nari Seva Sadan at Mashobra, falling in the age-group of 21-45 years. Most of the subjects were educated up to the high school standard. The education level of the subjects ranged between fifth to tenth standard.

Tools Used

- 1) **ICMR Psychological Stress Questionnaire:** This stress questionnaire is designed by, "Indian Council of Medical Research (ICMR)". The questionnaire was prepared by Fourth Advisory Committee (1991-92). The questionnaire was designed to assess psychological stress from various distressing or adverse social situations and was instructed to give their ratings for the severity of the left stress. Reliability of the measure of stress was estimated through Cronback-Alpha correlation ($r = .88$), split half ($r = .88$) and retest methods ($r = .72$). Reliability of the test was also examined through inter-relational consistency method ($r = .65$). The content validity of the scale was examined through squared multiple correlation method which ranged from .18 to .53 with median value of .35. Internal consistency of the tool was its seven subscales ranged from .24 to .77 ($P < .05$). This further established the content validity of the measure.
- 2) **Beck Depression Inventory (BDI, 1994):** Hindi version of Beck's depression inventory (Rajwinder Kaur, 1994) was used for measuring attitude and symptoms associated with depression. It is a 21 items scale with the total score ranging from 0 to 63. The

original scale (Beck et al., 1961) is also a 21 items scale. The BDI is reported to possess adequate internal consistency (Upmanyu and Reen, 1990; Vredenberg, Krames and Flett, 1985). The psychometric characteristics of this questionnaire have been well documented in the Indian set up (Upmanyu and Reen, 1990). Kumar (1990) reported that the alpha co-efficient of the BDI was .88.

- 3) **Case Study Method:** Case study in psychology refers to the use of a descriptive research approach to obtain an in-depth analysis of a person, group, or phenomenon. A variety of techniques may be employed including personal interviews, direct-observation, psychometric tests, and archives records. In psychology case studies are most often used in clinical research to describe rare events and conditions, which contradict well established principles in the field of psychology L.B. Christensen, 1994. Case studies are generally a single-case design, but can also be a multiple-case design, where replication instead of sampling is the criterion for inclusion (R. Yin, 1994).

Procedure

In the present study a percentage method was used in order to find out the quantity of stress and depression in normal and destitute females. The study was conducted on 35 normal females and 35 destitute females. To see the differences between normal and destitute females in stress and depression the t-test was also applied. To enhance the quality of the present study and for the better understanding of stress and depression in destitute females, qualitative method was used in this study.

Results and Discussion

Table – 1: t-test Analysis for Destitute and Normal Females on Stress and Depression

Items	Mean		SD	SED	t-ratio	Sig.
	Destitute Females	Normal Females				
Stress	119.17	11.71	9.07	2.18	49.29**	.01
Depression	29.97	5.37	2.05	0.49	50.20**	.01

$p < .01^{**}$

Table-1 shows that there is a significant difference between normal and destitute females on stress and depression. As destitute females have significant higher mean on stress (119.17/11.71) than normal females, hence the t-test was applied for testing the significance of mean difference and it is found to be significant at .01 level ($t=49.29^{**}$, $P<.01$). This represents that the destitute females are found to be more stressed as compared to the normal females. Studies have shown a higher occurrence of stressful life events in females without homes than in those with homes (North, Smith & Spitznagel, 1994: Wright & Weber, 1987). Even some studies have framed homelessness itself as a stressor (Goodman, Saxe & Harvey, 1991). Homeless women reported significantly higher levels of stress and depression than the housed women (Banyard & Graham-Bermann, 1998). Other research also shows that homeless females experience an exceptionally high number of stressful events throughout their life course, particularly in their transition to homelessness (Avraomov, 2000).

Destitute females also have significant higher mean on depression (29.97/5.37) than normal females, hence the t-test was applied for testing the significance of the mean difference and it is also found to be significant at .01 level ($t=50.20^{**}$, $P<.01$). This represents that destitute females are found to be more depressed as compared to normal females. The incidence of depression among destitute women around the world is higher than among normal women and men (Brown, Melchior, Waite-O'Brien, & Huba, 2002; Harvard Mental Health Letter, 2004; Kasen et al., 2003; Kaslow et al., 2000; Kneisl et al., 2004; Lilly, 2002; Wu & Anthony, 2000). The rates of depression for homeless women are higher than those of nonhomeless women in the United States. Rates of depression among homeless women of all ages range from 18% to 37%, whereas, the rate of depression in nonhomeless women in the United States is 1.9% (Galaif, Nyamathi, & Stein, 1999; Wu & Anthony, 2000).

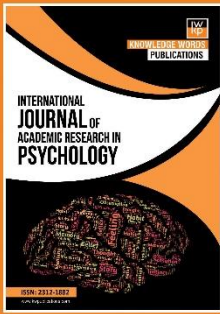
Conclusion

- There is a significant difference between normal and destitute females on their stress level i.e. destitute females have reported significantly higher level of stress as compared to normal females.
- There is a significant difference between normal and destitute females on their depression level i.e. destitute females have reported significantly higher level of depression as compared to normal females.

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Combined Intervention for Caregivers of Patients with Dementia: A Randomized Controlled Trial

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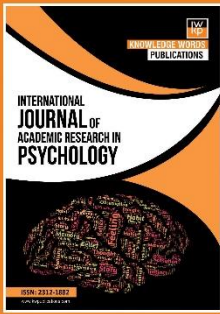
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Combined Intervention for Caregivers of Patients with Dementia: A Randomized Controlled Trial

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Abstract

Objectives: Caregivers of patients with dementia are at a greater risk of developing burden, strain and psychiatric morbidity in the form of depression. Psychotherapeutic interventions are essential in order to facilitate their role and improve their emotional state. This study presents a randomised controlled trial of a combined group intervention, including psychoeducational program and group psychotherapy intervention using Cognitive Behavioural Therapy, aiming to evaluate its effectiveness in psychological health of caregivers in Greece.

Method: Ninety seven caregivers were randomly allocated to an experimental group (58 participants) which participated in a 6-month programme- and a control group (54 participants) which did not receive any kind of intervention (was in a wait list). Psychosocial assessment was performed for anxiety, depression and burden.

Results: According to the analysis which was performed by protocol statistically significant differences were found between the experimental and the control group in levels of anxiety [$F(1.94)=20.94$, $p<0.001$], depression [$F(1.94)=36.93$, $p<0.001$] and sense of burden [$F(1.94)=51.44$, $p<0.001$]. The difference was in benefit of the experimental group.

Conclusion: Combined intervention for caregivers can have protective effects on their sense of burden, depression and anxiety symptoms.

Keywords: Cognitive-Behavioural Therapy, Psycho-Education, Caregivers, Dementia.

Introduction

Dementia is a serious neurodegenerative disease that affects functional and cognitive processes, resulting in progressive decline and deprivation of independence. During the course of the disease, the patient becomes disorientated and disorganized due to the manifested cognitive decline (Reitz, Brayne, & Mayeux, 2011); this dysfunction has an immediate impact on caregivers, who are required to assist patients in daily activities from the early stages. As the disease progresses, the patient becomes even less independent and the role of the caregiver becomes gradually more

demanding. There is extensive research evidence supporting that it is very common for the caregivers to experience high levels of burden and psychological morbidity as well as social isolation, physical ill-health, poor quality of life, relational problems, family conflict, problems with employment and financial hardships (Connell, Janevic, & Gallant, 2001; Eppers, Goodall, & Harrison, 2008; Brodaty & Donkin, 2009; Jönsson & Wimo, 2009; Van Vliet et al., 2010; Varela et al., 2011; Pinquart & Sörensen, 2011).

Psychological morbidity, which includes depression and anxiety, has been clearly correlated with dementia caregiving in numerous studies (Gaugler et al., 2008). Rates of depression vary from 23% to 85% and of anxiety between 16% and 45% (Brodaty & Donkin, 2009). A systematic review by Cuijpers (2005) reported that almost half of the caregivers develop a depressive disorder within a year. More recently Joling et al. (2012) found that from the 725 caregivers at risk, 180 (24.8%) developed depression within a period of 18 months.

However, not all caregivers are influenced to the same degree. In their review of predictors of and protectors from caregiver distress, Brodaty and Donkin (2009) classify the caregiver variables in three categories; personality characteristics, perception and experience of the caregiving role and coping strategies. It has also been shown that caregiver strain depends strongly on the sense of burden, in addition to the impact that it has on their daily routine, which varies according to the coping strategies and social environmental support they receive (Papastavrou et al., 2007; Aneshensel et al., 2000; Kramer, 2000).

From the above it is obvious that the intervention in this group is essential on one hand in order to facilitate their role and reduce the likelihood of institutionalization for care recipients (Mittelman et al., 2008) and, on the other, to improve their emotional state and quality of life (Parker, Mills & Abbey, 2008; Pinquart & Sörensen, 2006; Sörensen, Pinquart, & Duberstein, 2002; Schulz et al., 2002; Cooke et al., 2001). Interventions that have been applied extensively include: a) psycho-education models b) stress management c) psychological support d) family counseling and e) models of combined techniques (Llanque & Enriquez, 2012; Parker et al., 2008; Sörensen et al., 2006; Pinquart & Sörensen, 2006; Acton & Kang, 2001).

In particular, models that rely on psycho-educational components provide information on the symptoms and progression of the disease and on the effective management of the patient (Llanque & Enriquez, 2012; Parker et al., 2008).

Furthermore, stress management techniques are designed to help caregivers develop coping strategies in order to optimize their coping efficacy. Usually, techniques are drawn from Cognitive Behaviour Therapy. Caregivers are trained to become more flexible, so they can deal with the changes that inevitably will come, find alternative solutions, learn to accept the current situation (Gallagher-Thompson et al., 2010; Gallagher-Thompson et al., 2008; Selwood et al., 2007).

Models of psychological support target burden, so that the caregiver finds emotional support to deal with depression, anger, loneliness and loss (Gräbel et al., 2010; Chu et al., 2010).

Family counseling provides psychological support for all the members, either directly or indirectly involved. It helps to find more effective ways and facilitate communication by resolving conflict that may arise from caring for the patient. Additionally, it aims at strengthening the family bonds, so that all members participate equally to the care (Joling et al., 2012; Wang & Chien, 2011; Mitrani et al., 2006).

In more recent studies researchers report that they have designed multiple component interventions and have demonstrated better outcomes than those with single interventions (Callahan et al., 2006; Gitlin et al., 2003). Combined techniques models consist of a mixture of the above psychotherapeutic strategies. The criterion for designing of a psychosocial therapy with combined techniques is the need for psychological support on the part of the caregiver. Most combined interventions mentioned in literature include educational programs and practices of strategic management, which are based on the techniques of cognitive behavioural psychotherapy. Both interventions aim at reducing secondary stress factors and preventing stress (Mitrani et al., 2006; Secker & Brown, 2005).

The present randomised controlled trial was designed to assess the effectiveness of a combined intervention- a group psychotherapy intervention using Cognitive-Behavioural therapy (CBT) and a psychoeducational program intervention- in caregivers of patients with dementia. Group combined intervention aimed to help caregivers develop effective coping skills, manage their negative thoughts and feelings, and reinforce their sense of caregiving efficacy which in turn helped them to reduce depressive and anxiety symptoms.

The psychoeducational program was selected because it would be helpful for caregivers to learn about dementia and have realistic expectations about the disease process. It was, also, expected to help them in making difficult decisions about the care and treatment of their care receivers, and learn to be flexible in difficult situations. Their knowledge of the aspects of the disease and their own needs could encourage them to be involved more consciously in group psychotherapy intervention having specific therapeutic targets. This aspect is in accordance with previous evidence, which suggest that the willingness to attend a support service increases significantly when the sense of "need of support" increases. Neither the age or gender of caregivers and patients, nor the duration of illness was a significant predictor for its utilization (Llanque & Enriquez, 2012; Gräbel et al., 2010; Burks, Lund, & Hill, 1991; Goodman, 1991). According to previous studies, the combination of a psychoeducational program and psychotherapeutic intervention was expected to be more effective in reducing caregiver stress and depression than an educational program alone (Gallagher-Thompson et al., 2001; Selwood et al., 2007). CBT was expected to help caregivers cope better with their own feelings, learn ways of problem solving, in order to deal with everyday problems, and reach towards the acceptance of the disease in their life.

We hypothesized that this combined intervention would be effective on caregivers' emotional well-being. In particular, our hypothesis was that the experimental group would be better protected against anxiety, depression and sense of burden compared to the control group, after attending the combined intervention.

Method

Design and Procedure

This was a randomised controlled trial with measurements at baseline and 6 months after intervention. Each participant was assessed before and after the 6-month period of the study by the same trained psychologist who was blind to the allocation of groups. Both the initial and the follow-up assessments comprised of the following scales: Beck Depression Inventory- II – BDI-II (Beck, Steer, & Brown, 1996), Beck Anxiety Inventory – BAI (Beck et al., 1988) and Zarit Burden Interview (Zarit, Reever, & Bach-Peterson, 1980). In the initial assessment, all caregivers had been interviewed about

the specific difficulties they faced on caring their relative and their individuals targets of their participation in the intervention.

Ethical Considerations

Ethical approval was obtained from the Scientific Committee of the Greek Association of Alzheimer's Disease and Related Disorders. This ensures that the ethical rights of the participants are respected and that the research is carried out according to the national and international ethical guidelines. These included respect of the participants' right i) of anonymity and confidentiality of personal data ii) informed consent and iii) to withdraw at any time and for whatever reason without their statutory rights being affected. All participants have signed a written consent.

Access approval in Family Units in day centers of the Alzheimer's Association was received from the president of Greek Association of Alzheimer's Disease and Related Disorders. For open centre for the protection of the elderly access approval was received from the operating manager of centre.

Power Analysis

The primary outcome of this study was caregivers' burden as measured by ZBI. A previous study in the Greek population of Alzheimer's caregivers has shown that the ZBI has a standard deviation of about 16 and a mean near 40 (Koutsampasopoulos et al., 2008). Assuming that the test-retest correlation would be at least 0.3 after four months, and in order to be able to identify a difference of about 15% (i.e. 6 points) in a 2 (pre-post) X 2 (with/out intervention) design with power of 0.8 and $\alpha=0.05$, approximately 90 participants were needed. Adding 20% for possible drop-outs lead to a number of 108, i.e. 54 in each group. Since this was a simple randomization design, recruitment stopped when both groups reached the 54 patients limit.

Participants

All participants were primary caregivers of patients suffering from dementia in moderate stage and they were caring for their relative at home. Caregivers were recruited from Family Units in three day centers of the Alzheimer's Association and an open centre for the protection of the elderly. Exclusion criteria were the previous attendance in support and educational programs, the interruption of previous attendance, the presence of psychiatric disorders according to Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition (DSM-IV, 1994) and the presence of severe depressive symptoms according to Beck Depression Inventory (BDI-II) (Beck et al., 1996), which is in line with DSM-IV depression criteria, that required treatment with antidepressants. The reason of the exclusion was to avoid influence with medication.

The initial number of participants included in the study was 112 caregivers. Simple randomization was used independently in each of the four sites to allocate the participants to the experimental group (58 participants: 44 females/14 males, range age 30-85 years, mean age (std): 56.31 (13.70) and to the control group (54 participants: 42 females/ 12 males, range age 33-86 years, mean age (std): 57.24 (14.46)). The experimental group attended a psychoeducational program and a group psychotherapy intervention for 6 months allocated into sessions, each lasting 90 minutes. The two interventions were performed on the same morning. There was a 30 minute break between sessions. None of the participants complained of fatigue and tiredness during the interventions, all

of which were performed free of charge. The control group did not receive any form of psychological intervention but was on a waiting list. After the end of 6-months, they were included in the combined psychological intervention (Figure 1).

Seven caregivers of the experimental group did not complete the intervention program due to practical difficulties (n=3), health problems (n=2), lack of interest (n=1), and no systematic attendance (n=1). Eight caregivers from the control group did not participate in the follow up assessment because of lack of interest (n=5), practical difficulties (n=2) and health problems (n=1). The drop-outs of both groups were older in age than the so-called completers but there was no significant difference in any other demographic variables or in the questionnaire scores.

Ninety seven caregivers (51 from the experimental and 46 from the control group) finally completed their participation in the study and underwent the second assessment. The gender, age, education and relationship of the participants to the patients with dementia are presented in Table 1. The two groups were well matched regarding gender ($p=0.812$) and age ($p=0.407$); there was a slight difference in the relationship status ($p=0.287$) and in the level of education ($p=0.002$). Moreover, at baseline there were no group differences in terms of level of anxiety ($p = 0.957$), depression ($p = 0.851$) and sense of burden ($p = 0.476$). Both study participants could be defined as a non clinical group (Table 1). However, all differences were not significant when horizontal (spousal) and vertical (children) caregivers were compared individually between the two groups.

Measures

Beck Depression Inventory-II (BDI-II)

Depressive symptoms were measured by the Beck Depression Inventory- Second Edition (BDI-II) Long Form (Beck et al., 1996). The BDI-II is a 21-item self-report questionnaire. Participants respond to questions in relation to how they felt over the past week. The higher the score, the more serious the level of depression the instrument has detected. The BDI-II has good reliability and validity. It has strong internal consistency, with a coefficient alpha of 0.92, and good one week test-retest reliability ($r=0.93$, $p < 0.001$). The Greek translation of BDI-II shows good internal consistency ($\alpha = 0.86$) (Baklavas et al., 2009).

Beck Anxiety Inventory

The caregiver's anxiety symptoms were assessed by the Beck Anxiety Inventory (BAI) (Beck et al., 1988). The anxiety subscale consists of 21 items, assessing whether and to what extent participants report subjective, somatic symptoms of anxiety or symptoms of panic disorder over the past week. Answer categories of the items range from 0 (not at all) to 3 (very much). Higher scores indicate more severe anxiety symptoms. The BAI showed high internal consistency ($\alpha = 0.92$) and test-retest reliability over 1 week, $r(81) = 0.75$.

Zarit Burden Interview

The caregiver's burden was assessed by the Zarit burden interview (Zarit et al., 1980). The Zarit has 22 questions with four choices, ranging from 0 (never) to 4 (always) for each item. The total score (full score: 88) was used for the analyses. Higher scores indicate more severe sense of burden. It has a high internal consistency ($\alpha = 0.91$) and construct validity ($\alpha = 0.79$). The Greek translation of Zarit Burden scale shows excellent reliability ($\alpha=0.93$) (Papastavrou et al., 2006).

The Intervention Program

For the needs of this study, we designed a combined intervention which was applied in Greece for the first time. It consisted of a) a weekly group Psychoeducational program (90 minutes) and b) a weekly group psychotherapy session using CBT (90 minutes). Sessions were always held in the morning, at the day centre. Participants attended 24 sessions of each program (6 months).

a) Psychoeducational program

The aim of the psychoeducational program was to provide information to caregivers regarding the disease and the functionality level of the patient, in addition to guidelines for more effective care. The seminars were given by trained professionals and included neurologists, clinical psychologists, cognitive psychologists, dentists, physicians, dieticians and social workers. The topics covered a broad range of 4 categories: 1) General information about dementia, 2) Issues about caregiving – difficulties faced by caregivers, 3) Problems and difficulties faced by care receivers and 4) Ways of coping.

Caregivers of the experimental group (N=51) were separated in two groups in order that each attending group to consist of 20-25 persons. This regime was selected because it facilitated their active involvement throughout the seminars, by asking questions regarding patients or themselves, sharing their experiences, providing guidance and supporting other caregivers. The intervention in two experimental groups was facsimiled and was applied by the same person.

b) CBT group (CBTg)

The research required a combination of CBT and the clinical practice guidelines for group psychotherapy. Table 4 shows the topics included in 24 group sessions. The topics were selected based on the international literature about chronic illnesses and the initial interviews of caregivers.

CBT was used in order to help the caregivers develop new ways of interpreting the situation they are dealing with, become aware of their thoughts, identify their dysfunctional beliefs and change them with rational ones. Along with changing dysfunctional thoughts, CBT was oriented towards particular targets and focused on problems that emerge from the disease, aiming at changing the caregivers' behaviour (Beck, 1976; Burns, 1981).

For the CBTg to be effective, clinical practice guidelines for group psychotherapy by American Group Psychotherapy Association (AGPA) were performed (Leszcz & Kobos, 2008). These guidelines were used in order to plan, evaluate, modify, explicate and monitor the group therapy intervention in an evidence-based fashion. In particular, AGPA's clinical practice guidelines for group psychotherapy concerned the fields of creating successful therapy group, therapeutic factors and mechanisms, selection of participants, preparation and pre-group training, group development and process, therapist interventions, ethical practice and termination of group psychotherapy.

CBTgs included 7-8 caregivers. Group intervention was selected, because within the framework of a group, people have the opportunity to be acquainted with others having similar experiences and problems; this helps them express their feelings. Moreover, the therapeutic procedure assists them to communicate through active involvement and, thus, develop relationships, which will provide them support by decreasing feelings of isolation (Yost et al., 1986; Yalom, Brown, & Bloch, 1975). CBTg was performed by an expert psychologist trained in CBT.

Statistical Analysis

The data were analyzed on a per-protocol basis, including only subjects that completed both evaluations, including the intervention for the experimental group. The questionnaires' internal

consistency was measured using Cronbach's alpha. To test for the existence of pre-intervention differences in the two groups, t-tests, Fisher's exact tests and Kendall's tau-b were performed for quantitative, dichotomous and categorical variables, respectively. A multivariate analysis of variance (MANOVA) was performed as an initial overall investigation of the intervention's effect. The analysis of the three outcome variables at the post-intervention assessment consisted of a series of analyses of covariance (ANCOVA), introducing participants' pre-intervention scores (simple models) as well as possible confounding variables (extended models) as covariates. F and partial eta-squared values were reported as measures of the effect size of the intervention. The level of statistical significance was set to $p=0.05$.

Simple regression analysis was performed to test the association between change of burden anxiety and depression with the intervention condition. The statistical package SPSS for Windows, version 8 was used for the statistical analyses.

Results

All three questionnaires used in this study (BAI, BDI, ZBI) had very high internal consistency, as measured by Cronbach's a coefficient ($\alpha=0.885$, 0.814 and 0.888 , respectively).

The initial MANOVA showed that at least one of the three outcomes were significantly affected by the intervention program [$F(4.93) = 3.198$, $p=0.017$]. The results of the following ANCOVAs are shown in table 2.

Anxiety

The ANCOVA revealed statistically significant differences between the experimental and the control group in this variable [$F(1.94) = 20.94$, $p<0.001$] with caregivers in the experimental group showing a lower mean score than caregivers in the control group. Repeating the analysis including education and relationship status as confounding variables did not change the significance of the intervention [$F(1.92) = 16.43$, $p<0.001$]. Neither of the confounding variables had a significant effect on anxiety.

Depression

A significant effect of the intervention on the experimental group was observed compared to the control group [$F(1.94) = 36.93$, $p<0.001$]. Inclusion of the education and the relationship status in the model did not affect the comparison [$F(1.92) = 29.74$, $p<0.001$].

ZBI

The Zarit Burden Interview was the assessment most influenced by the intervention as shown by the ANCOVA [$F(1.94) = 51.44$, $p<0.001$]. Neither education nor relationship status had any significant effect on this result [$F(1.92) = 43.50$, $p<0.001$].

In order to investigate the association of change in burden, anxiety and depression with the intervention condition a simple regression analysis was computed. The results showed that intervention had a significant positive association with change in ZBI ($R^2=0.341$) as well as with BAI ($R^2=0.176$) and BDI change ($R^2=0.236$), as seen in Table 3.

Discussion

The aim of the current study was to assess the effectiveness of a combined psychological intervention in caregivers of dementia patients. We assumed that the intervention would have positive effects on experimental group, compared to the control group, protecting them from

deterioration. Accordingly, the experimental group showed stability and tendency improvement on anxiety and depressive symptoms as well as on the sense of burden, whereas the control group showed deterioration in these factors. These results showed the positive effects of psychological interventions and are consistent with previous studies which indicate the effectiveness and the impact of this type of interventions on caregivers' psychological health (Chu et al., 2010; Mittelman et al., 2008; Mittelman & Roth, 2004; Stolley, Reed, & Buckwalter, 2002; Marriott et al., 2000).

The protective role of intervention is highlighted by the stability of experimental caregivers in non clinical ranges as well as the deterioration of control group. This worsening of the control group can be attributed to the fact that dementia is a rapidly progressive neurodegenerative disease. Therefore, a time period of six months, might be enough for the development of severe symptoms in the moderate stage dementia patients that were included in the current study. As it was mentioned in the introduction, the progress of dementia might affect the emotional health of the caregivers. Furthermore, previous studies indicate that caregivers in intervention groups were significantly less depressed (Chu et al., 2010; Mittelman et al., 2008; Pinquart & Sorensen, 2006; Coon, Thompson, Steffen, Sorocco, & Gallagher-Thompson, 2003; Hepburn, Tornatore, Center, & Ostwald, 2001; Gallagher-Thompson et al., 2001) and experienced lower burden (Ko, Lee, & Baumann, 2007; Pinquart & Sorensen, 2006; Hepburn et al., 2001) than those in the control group. However, it should be pointed out that the research studies mentioned above were performed in participants that were in the clinical range for anxiety and depression.

In contrast to the above results, Hebert et al. (2003) has shown that an intervention based on stress appraisal, coping skills and behavioural management of the patients with dementia did not change depression, anxiety or burden in the intervention group compared to the control. Furthermore, according to a systematic review of Selwood et al. (2007) there was no difference in caregivers' depression or burden in interventions based on group behavioural therapy, supportive therapy or education. Only interventions based on teaching coping strategies, either individually or in a group, appeared to be more effective in caregiver's psychological health. In general, group interventions appeared less effective than individual interventions.

These results are in contrast with our result that has shown that intervention had protective role on sense of burden, depression and anxiety in the intervention group compared to the controls. The difference between these refuted results can be attributed to three reasons i) the type of intervention, ii) the duration of intervention, iii) the emotional state of the participants.

Type of intervention: combined interventions, defined in literature, have different forms of interventions such as psychoeducational, counseling, skills training and emotional support. There are many different types of interventions that can be used and this variability makes it very difficult for any trial to compare between them. In the current study we investigated a specific type of combined therapy, designed by our scientific team and tailored to specific problems and needs of caregivers about the difficulties of care of their relative, as they had mentioned in the initial interview. We hypothesize that the effectiveness of the intervention is attributed to the structured design of intervention based on individuals' targets of caregivers. This aspect is also reinforced by Brodaty, Roberts and Peters (1994) who concluded that interventions should be tailored to specific problems of individuals' caregivers. Moreover, a systematic review by Smits et al. (2007) suggested that research and practice should focus on the diversity of needs of different target groups.

Secondly, it has been found that the duration of intervention may affect the effectiveness of intervention. According to the literature (Dröes et al., 2004; Quayhagen & Quayhagen, 2001; Moniz-Cook et al., 1998), long-term support programs appeared more efficient than short-term programs. The duration of the intervention in the current study was 6 months (24 sessions) that is to our knowledge longer than all the other studies performed.

The emotional state of caregivers: One of the reasons that probably interpret the difference between these refuted results, can be attributed to emotional state of the participants. In the recent study, the participants were not in a clinical range as concerns the anxiety and depression (mild anxiety and depression symptoms) as well as they had a mild to moderate burden. The participants of others study were in clinical range. One interpretation is that, that kind of interventions and especially the psycho-education interventions, have better effects on caregivers when they had preventive role. We assumed that the knowledge about the progression and the symptoms of the disease, the acquisition of coping strategies, the management of negative feelings and the adjustment of important aspects of care such as enriching the support group network or making appropriate decisions about the care, can help caregivers to be ready for the future and more resistant. Therefore, it can have protective effects on them. CBT was appropriate method to cope with the above themes.

The effectiveness of CBT on caregivers' depression and burden has been shown in previous studies (Pinquart & Sorensen, 2006). According to CBT's theory of depression, negative or dysfunctional automatic thoughts are primary in the change of depressed mood (Clark & Beck, 1999). Cognitive behavioural interventions aim to detect, modify and correct automatic negative thoughts. Automatic thoughts would play a mediating role in the relationship between changes in dysfunctional attitudes and depressive symptoms. In CBTg sessions with caregivers, one of the main target was to identify and modify their automatic negative thoughts and their dysfunctional attitudes that concern themselves, their patients' behaviour and their self-efficacy above their caregiver role. Self-efficacy is one's perception for its abilities to cope through various situations (Bandura & Adams, 1977). Self-efficacy correlates with depression (Gilliam & Steffen, 2006) and anxiety (Bandura, 1988).

So, caregivers with less dysfunctional thoughts on the disease's progress and their role, and with high sense of self-efficacy are able to deal better with any caregiving difficulty, are more acceptable to any possible failure, and are able to protect themselves from any other consequence of dementia, such as depression and anxiety.

As concerns the result about the caregivers' burden, the research has showed that experimental caregivers remained in a mild to moderate stage, showing tendency improvement, whereas the control group turned to moderate to severe range of burden. This result is validated considering what burden is. Caregiver burden is a state of physical, emotional, and mental exhaustion that can be caused from objective factors such as the patient's cognitive impairment and functional disability, as well as from subjective factors such as caregivers perceived situational control, perceived role conflict, positive appraisal and coping strategies (Pearlin et al., 1990). The sense of burden mirrors the subjective difficulties as well as the emotional state of the caregiver. According to recent studies about dementia caregivers, the development of coping strategies as well as anger, depression and stress management, establishes the sense of control and self-efficacy in the caregiver's skills that reduce depressive feelings and the sense of burden (Selwood et al., 2007; Coon et al., 2003). The studies of Papastavrou et al. (2007); Papastavrou et al. (2011) further showed that

burden is related to specific coping strategies, as low-burden caregivers used more positive coping strategies such as problem solving and seeking social support than the more burdened ones.

To conclude, this study shows that 6-month group intervention that combines a psychoeducational program with group psychotherapy using CBT can have protective effects on caregivers' sense of burden, depression and anxiety symptoms, whereas in the control group the symptoms of depression, anxiety and sense of burden were increased; a finding that supports our hypothesis for the significance of CBT.

These conclusions should be interpreted very cautiously due to some limitations of the current study. First of all, the small size of the participant sample limits the generalizability of the results. Furthermore, no follow-up after six months was performed, which is in the authors' plans to be performed in another study. Another limitation is the lack of details of the patients' neuropsychological profile. Patients, whose caregivers participated in the study, had the diagnosis of moderate stage of dementia but their clinical examination was not available. One other limitation of the study, is that recent appropriate measures of caregivers distress such as Dysfunctional Thoughts about Caregiving Questionnaire were not administered in the study participants and basic measures such as the Zarit scale were selected. The lack of a measure about the dysfunctional thoughts is a limitation of the study because of the important role they play in the CBT.

In spite of these limitations, the present study has several implications for future investigations. Further research with a large size is needed to evaluate the efficacy of the present combined intervention on caregivers with patients in early, mediate and severe stage of dementia. Furthermore, it will be interesting to examine further outcomes other than depression, anxiety and burden, such as dysfunctional thoughts, coping skills and self-efficacy. Also, it should try to evaluate some interesting aspects of this approach, such as 'which is the most effective factor of this combined intervention?', 'what are the preferred participant characteristics?' and 'which is the preferred intervention duration?' towards a more effective intervention.

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Appendix

Fig.1. Participant's flow from 1st -2nd assessment

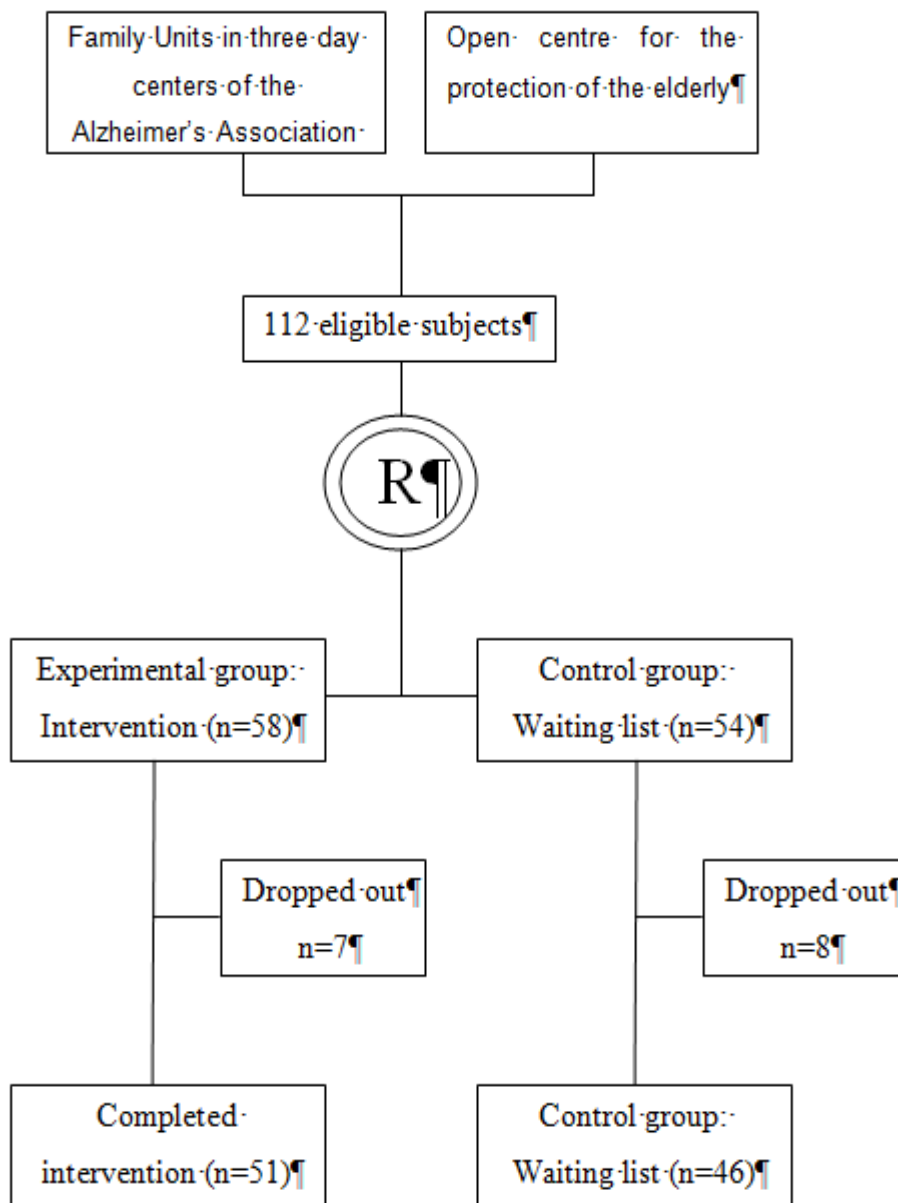


Table 1. Demographic characteristics and difference of performance between the two groups at baseline of participants

	Exp. group (n=51)	Ctrl. group (n=46)	Test statistic	p (two-sided)
Caregivers				
Sex, n (%)			Fisher's Exact	0.812
-Male	11 (21.6)	11 (23.9)		
-Female	40 (78.4)	35 (76.1)		
Mean age (std)	54.18 (12.44)	56.48 (14.77)	$t^{95}=-0.833$	0.407
Education years (std)	12.69 (4.14)	9.91 (4.59)	$t^{95}=-3.131$	0.002
Relationship, n(%)			Fisher's Exact	0.287
-Spouse	15 (29.4)	19 (41.3)		
-Child	36 (70.6)	27 (58.7)		
BAI	8.57 (6.65)	8.65 (8.52)	$t^{95}=0.054$	0.957
BDI	10.43 (7.12)	10.70 (6.66)	$t^{95}=0.188$	0.851
ZARIT	39.55 (17.45)	37.20 (14.60)	$t^{95}=-0.716$	0.476

BAI, BDI, ZARIT scores:Means (\pm SD)

Footnotes

BAI: Beck Anxiety Inventory

BDI: Beck Depression Inventory

ZARIT: Zarit Burden Interview

Table 2. Differences of performance between the two groups after the intervention

Variable	Post - intervention		Adjusted values Exp./Ctrl. group	Effect value (F)	P	Effect size (η^2)
	Exp. group	Ctrl. group				
BAI	7.25 (7.00)	14.20 (11.85)	7.29 / 14.16	20.94	0.001	0.182
BDI	6.76 (5.20)	13.67 (8.40)	6.84 / 13.59	36.93	0.001	0.282
ZARIT	35.57 (14.77)	46.85 (16.42)	34.69 / 47.82	51.44	0.001	0.354

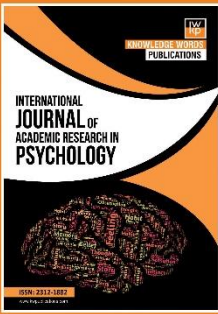
BAI, BDI, ZARIT scores:Means (\pm SD)

Table 3. Association of change in burden, anxiety and depression with the intervention condition

Dpt. variable	Indpt. Variable	β	t	p	R ²
ZBI change	intervention	0.584	7.01	0.001	0.341
BAI change	intervention	0.420	4.51	0.001	0.176
BDI change	intervention	0.485	5.41	0.001	0.236

Table 4. Content of CBTg

	Content
Session 1	Welcome, introduction and targets of the intervention Confidentiality Specific targets of caregivers
Sessions 2-3	Focus on patients with dementia and relationship with them (past, present, future)
Sessions 4 -6	Focus on caregivers' role Perceptions and thoughts about care and their role Sense of effectiveness
Session 7	Discussion about their social support network Developing communication skills
Sessions 8	Feedback about group process and personal development Sharing impressions about others
Sessions 9-11	Anxiety management Teaching coping strategies Problem solving
Sessions 12-14	Coping with anger, guilt and defeat
Sessions 15-16	Making difficult decisions, self-efficacy
Sessions 17-23	Focus on the acceptance of disease (redefinition of their personal goals and life expectations, integration of disease in their life with functional way and awareness of their role)
Session 24	Discussion about achieved goals Thoughts and feelings about procedure and group members



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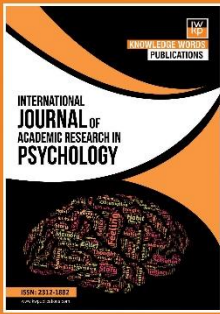
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Crises of Maturity and Sexual, Behavioral and Psychological Problems Related to Girls with Intellectual Disability

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Abstract

People with intellectual disability in addition to having an IQ lower than normal are with the disorder in adaptive behavior. Adolescence is especially important for girls and boys with intellectual disability and is one of the important issues in the period for these people is the maturity issue is known as the crisis and followed by mental, behavioral and sexual problems for them. The aim of this study was to investigate the crisis of puberty and mental health, sexual and behavior problems in girls mentally retarded and providing effective ways to deal with these problems. For this reason, to take advantage of descriptive-documental method and review necessary information scientific literature in the field of adolescence crisis and related problems in girls with intellectual disability have been collected. Most findings indicate an increase in the prevalence of mental and behavioral disorders in mentally retarded adolescents is during puberty. The most important mental and behavioral disorders in adolescence and maturity in people with mental retardation are: mood disorders, depression disorders, Psychotic Disorders, Anxiety Disorders, attention deficit disorders. The research also show

that the people cannot acquire knowledge from other people's about the issues of maturity and have not ability to read the books and magazines and in the schools usually there is no the necessary and sufficient time. The results also indicate that in both normal and mentally retarded persons existence some features may be increase the tendency of people to sex crimes in adolescence including: defect of behavioral- cognitive skills and evaluation and processing skills, the being humiliation and ignored by others, lack of confidence, sexual fantasy, and in most cases the patterns that cause sexual arousal. According to the research results, it find that the risk of sexual abuse in people with intellectual disability is more than normal people. Problem of mentally retarded girls and lack of skill in applying cognitive strategies for solving problems, lack of understanding and acquiring of proper intentions of others, has restrictions in viewing behavioral consequences and providing a more limited solutions to solve individual problems in creating sexual- behavioral and mental problems. Mental retarded girls with having the lower IQ and impairment in adaptive behavior to solve individual and social problems has major flaws. So mature and its major changes can to make a major mental and behavioral sexual problems for them and their families. At the end, propose solutions for dealing with such sexual- behavior and mental problems in maturity of the people is necessary, including: increase the control over the people - Increase the skills of teachers in dealing with the problems of the individual, increase opportunities for special schools to deal with abuse and sexual problems such subjects with holding extra-curricular programs.

Keywords: Puberty, Puberty Crisis, Behavioral Problems, Mental Problems, Sexual Problems, Intellectual Disability.

Introduction

Adolescence is one of a long period of life with rapid growth and changes in cognitive, emotional, social and physical. Puberty is first step of adolescence and may be one of the challenges of this period. Puberty is process of physical change that its main characteristic is growthinstinct and secondary sex characteristics (Mikouchi, 2003). Puberty is origin of many variations on the individual and physical changes of puberty has the strong effect on the psychological, behavioral, social and mental of the people and change emotional and psychological tendencies, which is why the rate of prevalence of behavioral disorders like anxiety, aggression, sexual problems and delinquencyare increased in this period (Ahadi & Mohseni, 1999).

Mental retardation is such the phenomenon that getting it makes a lot of problems for the patient and his family. These individuals also lower than normal IQ have adaptive behavior disorder. They have major defects in personal and social problems-solving and understanding of the laws governing the community and having skills of self-supporting in different positions. Adolescence is a special and important period for girls and boys mentally retarded. Mentaldisorder decreases a teen's capabilities than most his teenager group with normal IQ in the population and may be provide the incidence of psychiatric, behavioral and characteristic disorders. In addition, the puberty is the maturity period and in this period primary and secondary sex characteristics develop and will have functionality, and these changes in individuals with intellectual disability is considered as an important occurrence, and most families are faced with a crisis and makes a variety of chocolate (Massey, 2000).

Most Important Mental and Behavioral Disorders of Puberty in Girls with Intellectual Disability Include

A disturbance of mood: Anxiety, phobias, OCD, bitterness and somatic diseases includes common disorders. The first common symptoms are different changes in vital functions including reducing appetite and insomnia. Stressful events are often the cause of this disorder. But life changes are usually able to create these disorders (Amank, 2000). Severe depression, social withdrawal, reversible of actions that relate to the period before living such as: addiction, deterioration of the performance and behavior of children and mental and psychosomatic retardation (Massey, 1998).

Depression: Depression often occurs during puberty in adolescents with intellectual disability and the disorder affects educational and emotional progress of individuals (Massey, 2000).

Psychotic disorders: From the perspective of clinical, various forms of schizophrenia can be seen in mentally retarded. Common symptoms in this disorder include: credulity, delusions and simple hallucinations, thought disorders, especially verbal expressions, word making, frequent prate, excessive or numbness motional activities. The disorder is often associated with behavioral symptoms such as of aggressive and impulsive behavior and self-harm (Village, 1998).

Anxiety disorders: Anxiety disorders in mentally retarded often occurs in different forms such as: aggression, anger, fear and crying and in some cases of anxiety disorder can equal to generalized anxiety disorder. In the cases that cognitive impairment is less and people can talk about their anxiety, diagnosis is easier. In other cases, the diagnosis is only hypothetical. Among the common anxiety disorders in this period are phobias and obsessions era. The obsessive treatments in adolescents with intellectual disability can make compulsive disorder (Massey, 2000).

Attention Deficit Disorder: Attention deficit disorder/hyperactivity is a problem, which about 5 to 10 percent of all children suffer. These patients suffer from distraction, inattention, impulsivity, and hyperactivity. Generally they have trouble in learning, tracking and finishing the tasks, make friends and keeping friends. Prevalence of attention deficit disorder according to the statistics of the organization of Psychiatry American mental retardation in 9 to 18 times higher than the general population, and especially in people with hyperactivity and attention deficit, puberty and adolescence and simultaneous changes may be increasing the risk of this complication (Melentir, 2000).

Sexual problems and issues: sexual motivation sin some of about maturity, in some of people appears from the adolescence steps and even in some of people from stage 5 to 6 years. However, development and peak of the mode is in maturity and adolescence ages (Ghaemi, 1998). Sexual function is effected by environmental factors of biological, psychological and sociological. Internal and external genitals, Hormones and neuro-hormone, social and economic status and the dominant social customs and style all affect expressing sexual desires (Ghobadi, 2002). Problem srelated to the girls and boys with mental retarded gradually increase along with age of them, its other word, status of the people is that faces with more problems in higher ages than the childhood. Sexual problems and demonstration are including cases that create the weighty issues for them and their family

resort them to the non-logical solutions to fix the problems (Chastr, 2000). Level of knowledge about sexual issues in people with intellectual disability is lower than the normal people. The people have a vague and partial or wrong and inappropriate information about pregnancy, sexually transmitted diseases, homosexuality and other sexual deviations. One of the reasons of limitations of the knowledge in them is weakness of social and verbal skills in them, these people to inform the issues cannot acquire information required from other people and they have not ability to reading book and magazines in the field as sources of information and comprehension, usually in schools there is no special curriculum for training such issues and moreover education about its sex and differentiation between two sex and necessary and sufficient opportunities (Timas, 2002). Behavior such as showing genitals, lack of hiding its sexuality in public, expressing tendency to the relationship with others even the family in terms of contrast with human ethical and social criteria threats family in terms of dignity and prestige and they think to find the fast and sometimes sectional solutions. For example, sometimes family of the people complaining about that their daughter express strongly its sexual. Should be known except for the rare cases which young, teen or even child with mentally retarded due to hormonal problems suffered sexual overstimulation. In other cases, background of sexual demonstration in such people has environmental origin and should be think about the comprehensive solutions including drug treatment and educational seeking choice, maybe if we know what factors cause increase and the incidence of the demonstration achieve to answer of a lot of questions (Davermanesh, 2001). The including issues cause to create problems for the people with mentally retarded and their family is masturbation, in the people with mentally retarded like normal people there is masturbation but in adolescents and young with mentally retarded the problems is along with the large problems. Because the masturbation usually is seen in public locations and in inappropriate times and more frequently and for long form and sometimes cause injury and damage to the people, sexual crime in people with mentally retarded rarely seen (EstGate, 2006). But some of factors increase risk of sexual crimes in this people, including: sexually abused, the lack of information and sufficient education about sexual issues, disability in learning community terms about sexual behavior. If there are sexual crimes, cognitive - behavior therapy can reduce sexual crimes (Emerson, 2003).

Background of the Study

Laing quote of Swartz & Master express that in both group of normal people and mentally retarded does existence of the following feature may increase the people tendency to the sexual crimes, the symptoms and marks are: impairment of behavioral - cognitive skills and processing and evaluation skills, indifference and being humiliated by others that in some cases leads to create depression modes in people, lack of confidence, sexual imagination and in more cases the patterns which causes to sexual excitation and usually the patterns is same in both group of normal people and mentally retarded does (Lane, 1999). Teenagers with mentally retarded show a keen interest in the opposite sex and often cause to concern parents. Defects in social skills cause the people show inappropriate behaviors in against opposition sex and often provides the ground for sexual abuse of them. It should be mentioned that the risk of sexual abuse of people with mentally retarded is more than the common people. Some statistics show 39 to 68 percentage of girls with mentally retarded before age 18 are sexually abused and the action be carried out by different people (Gold Stein, 2001). In regard to sexual problems in people with mentally retarded so far little research has been done, in 2003 a

research in order to study sexual problems was done by Thomson, in this research 86 teens with mentally retarded between ages 12 to 20 were selected and PIMRA - S questionnaire was used to investigate the sexual problems, results show the sexual anomalous behaviors including: showing genitals and intense sexuality than opposite sex in the public locations in people with mentally retarded in the different environments including school, house and work environment are seen (Thompson, 2003). In 2006 a research was conducted by Beravent to study and evaluate sexual problems of normal and with mentally retarded adolescent girls. In this research 100 teens with IQ 50 to 70 and 100 teens with normal IQ in ages 12, 16 were selected and interviews were done with parents - teachers. Outcomes of the research show there is a difference between two groups of the girls in the field of problems such: sexual demonstration in against opposite sex, sexual panache and going to public with genital and the problems in girls with mentally retarded was more than normal girls and some of mothers of girls with mentally retarded concern about the problems in their girls (Beravent, 2006).

Alsept (2004) quoted from Anderson (1987) suggests that generally prevalence of psychotic and behavioral disorders in adolescence with mentally retarded, 3 to 4 percent increase after puberty. He placed these disorders in adolescence in a multi-category:

- Destructive and anti-social behaviors (extraversion disorders) that its prevalence is between 3 to 5 percent.

Emotional problems and disorders (introspection disorders) that its prevalence is between 2 to 5 percent.

- A combination of mental and behavioral problems and physical disorders that its prevalence is between 1 to 3 percent. (Alsept, 2004). Liu (2000) conducted a study with aim of behavioral problems in adolescent girls with mentally retarded and normal adolescents in China. In this study, 85 adolescent girls between ages 11 to 18 were selected and were studied. The tools used in the study was Robert Hutton's scale of dimension of social and emotional, the scores obtained on each scale suggested that the prevalence of behavioral problems was in maturity and in scales of avoidance of interactions with friends, engage with aggression, avoidance of interaction with the teacher, inappropriate behavior, reactions indicative of depression and physical awesome reactions, mental retardation achieved higher scores (Liu, 2000). In 2002 "Dikcer" conducted a research to study and assess emotional and behavioral problems in normal adolescents and those who with intellectual disability. The results showed that problems like anxiety, depression and somatic complaints of educable people with retardation was more than trainable people with retardation and the cases such problems of attention, aggression, cogitation, thinking and isolation problems in both groups of mentally retarded more prevalent than in the general population (Dicker, 2002).

According to the above subjects, the article intended to examine the crisis of puberty and mental health, sexual and behavioral problems in girls with intellectual disability and provide effective solutions to deal with these problems by descriptive -documental way and search in the existing literature and valid.

Methods

Methods of the study was a descriptive-documental. And has been tried to collect and review scientific authoritative sources of necessary information regarding the crisis of puberty and the problems related to it in girls with mental retarded.

Results

The findings suggest that behavioral problems in children and adolescents with intellectual disability is more than subjects with normal IQ its reasons are those cause to create these problems in normal children and adolescents. Moreover, special problems that seen in individuals with intellectual disability should be considered low intelligence associated with emotional failure, characteristic problems and behavioral disorders (Emerson, 2005). Considering the findings also could be said that people with intellectual disability in different course of life (childhood, adolescence, adulthood) are seen more emotional and behavioral problems in them and this problem can have several causes, for example, states such as anxiety, depression, sadness and seclusion, lack of sympathy of others leads to increased aggression and on the other parent is not involved in social activities and the less support the family and friends is an important factor in isolation of the individual (Bilo, 2003). It should be noted that the correct interaction of parents and youth has important role in creation of appropriate behaviors. The parents who deal with children with intellectual disability by aggressive and punitive behavior use harsh parenting strategies including physical and verbal attacks. They are less able in response to their children's needs and solve the problems and their tolerance to understand their children's wrong behavior is low. It causes to prevalence behavioral problems in children and depressed mothers who are away from their children and because of the anxiety and guilt in response to the needs on their children is unstable and cause negative emotions. In addition some the improper practices are taught through ongoing interpersonal interactions within the family and parents and relatives using improper methods cause to strengthen undesirable behaviors (Duffy, 1998).

Conclusion

Adolescence is associated with physical and mental rapid changes. During this period, physical growth, followed by mental and emotional changes, and teenagers become curious and sensitive to the changes. Therefore, the psychological and behavioral disorders are increased. Should be noted that important the girls and boys with intellectual disability also enter to adolescence and maturity and have different changes of this period, including prevalence of sexual secondary traits and sexual desires with the difference that the group the due to having low IQ have with more problems. This group of adolescents is excluded due to mental constraints, in use of educational resources that a use of it requires mental ability and on the other hand their limited relationship with community intensifies this process. In adolescents with intellectual disability due to weak of the cognitive, social, verbal skills and limited of their aware about sexual issues, sexual demonstration is more seen and sometimes the environment where the person life provide the ground for this, the people are disable in learning social terms and regulations and for this reason indicates sexual desires in the presence of others. with regard to the results and findings achieved, release of mentally retarded individuals is out of moral solutions, so should be attempted to control their deviant ideas and sectional sexual behaviors by proper and mentally fit them training and the provision of suitable places for games and entertainment of them. In this regard should be use experienced trainers' education and training that meets the needs of these children and as well as have the spirit of patience and compassion for these children. Physical and motional games for the children can drain their emotions. Crafts such as sewing, embroidery, carpentry, painting and many other simple crafts can be effective in the control of these children.

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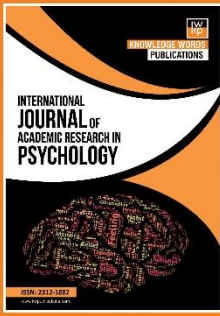
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Psychosocial Determinants of Identified Adolescents, Addictive Behaviors in Ado-Ekiti Local Government Area of Ekiti State

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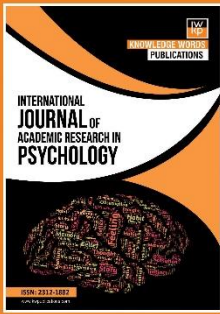
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Psychosocial Determinants of Identified Adolescents, Addictive Behaviors in Ado-Ekiti Local Government Area of Ekiti State

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Abstract

The study investigated the psychosocial determinants of identified addictive behaviours of adolescents in Ado Ekiti Local Government. The researcher employed the usage of descriptive research design of the survey type. The population for the study involves all the adolescents in Ado Ekiti Local Government Area of Ekiti State, Nigeria. A self designed research instrument titled "Addictive Behaviour Questionnaire" (ABQ) was used for gathering data. Experts in the Departments of Guidance and Counselling, Human Kinetics and tests and measurement ensured the validity of the instrument. A reliability coefficient of 0.75 was obtained using test-retest reliability and Pearson product moment correlation analysis. Copies of the instrument was personally administered by the researcher.

The data generated were analysed using inferential statistics of t-test and analysis of variance. It was revealed that the family structure and economic status of adolescents significantly influence their addictive behaviours. Based on these findings parents should ensure that there is cohesion and stability in their homes to discourage adolescents involvement in addictive behaviours. Also parents, guardians, and all the stakeholders in the upbringing of adolescents should make adequate provision for the needs of adolescents to enhance their development of good identity. However this study could be of benefits to male and female adolescents, parents, teachers, counsellors, curriculum planners, caregivers, health care practitioners and stakeholders in the upbringing of adolescents.

Keywords: Psychological, Determinants, Adolescents, and Addictive Behaviours.

Introduction

Adolescence is a transitional period in the human life span, it is a linkage of childhood to adulthood. Puberty is the onset of adolescents. It is a period of rapid physical maturation involving hormonal and bodily changes that occur during early adolescence. This puberty attainment is determined by nutrition, health, heredity and body mass. Archibald, Graber and Brooks-Gun (2003) observed that puberty is not a single, sudden event. Puberty is the evidence that a young girl and boy

is experiencing developmental changes. Whenever young girls and boys are at the spurt of growth (Puberty) there are changes in growth such as hormonal changes. This is experienced in hypothalamus, pituitary and the gonads. The concentration of hormones spontaneously increases during adolescence (Auchus & Rainey, 2004; Susman, Dorn & Schiefelbein 2003; Susman & Rogol 2004).

Accompanied with the hormonal increment and changes are increment in height, weight and sexual maturation. The rate at which adolescents gain weight follows approximately the same developmental timetable as the rate at which they gain height. Marked weight gains coincide with the onset of puberty. During early adolescence girls tend to outweigh boys, but just as with height, but by about age 14 boys begin to surpass girls. Also at the onset of puberty male pubertal characteristics develop by increment in penis, testicle size, straight pubic hair, minor voice change, first ejaculation, onset of maximum growth, appearance of hairs in the armpits and growth of facial hair, this is accompanied by height spurt in female they experience breast enlargement or pubic hair, hairs appear at the armpits, there is marked growth in height, widened hip and menstruation begins. The girls experiences erratic menstrual cycle, some girls don't ovulate at all until a year or two after menstruation begins. By the end of puberty the females breast have become more fully rounded.

All these changes in body image makes adolescents to be preoccupied with their bodies and develop individual images of what their bodies are like. All these makes the boys and girls to look at mirrors on a daily and even hourly basis to investigate if they could still detect different structures that are changing in their bodies. These preoccupation with ones body image is strong throughout adolescence but it is acute during puberty. This is a time when adolescents are more dissatisfied with their bodies than in late adolescence (Graber & Brooks – Gunn, 2001; Wright, 1989).

There are gender differences in adolescents' perception of their bodies. In general girls are less happy with their bodies and have more negative body images, compared with boys feelings about their bodies (Brooks-Gunn & Paikoff, 1993). As pubertal change proceeds, girls often become more dissatisfied with their bodies, this may be as a result of increase in body fat whereas boys become more satisfied as they move through puberty, probably because their muscle mass increases (Gross, 1984).

Adolescence is not a time of rebellion, crisis, pathology and deviance. It is a time of evaluation, of decision making of commitment, of carrying out a place in the world. As adolescents are progressing in their development they tend to face various emotional challenges. These are exemplified in various ways such as sexuality, having sexual identity, risk factors for sexual problems usage of contraceptives, substance use and abuse, health challenges risk taking behaviour and in most cases death of adolescents.

Sexual development and interest in sex are normal aspects of adolescent development and majority of adolescents have healthy sexual attitudes and engage in sexual practices that will not compromise their development. The sophisticated media, especially television teaches adolescents about sex (Collins, 2004; Galician, 2004; Gruber & Gruber, 2000; Ward & Caruthers, 2001). Adolescents are exposed to explicit sex in TV shows and videos, lyrics of music, internet websites (Roberts, Henrikson & Foehr, 2004). Ward (2003) reported that frequent watching of soap operas and music videos were linked with greater acceptance of casual attitudes about sex and higher expectations of engaging in sexual activity. Adolescence being a period of sexual exploration and experimentation, of sexual fantasies and realities, of incorporating sexuality into ones identity

adolescents have an almost insatiable curiosity about sexuality mysteries. They think about whether they are sexually attractive how to do sex and what the future holds for their sexual lives. The majority of adolescents eventually manage to develop a mature sexual identity, but most experience times of vulnerability and confusion along life's sexual journey. All these maybe accountable for the crime of sexual violence pervading Nigeria. This is evidence in the cases of adolescence, sexual harassment, embarrassment and rape pervading Nigeria society.

Most adolescents become sexually active at some point during adolescence, some adolescents engage in sex at early ages before age 16 and experience a number of partners over time (Cavanaugh, 2004). These adolescents are the least effective users of contraception and are at risk for early, unintended pregnancy and for sexually transmitted infections. Early sexual activity is linked with other risky behaviours such as excessive drinking, drug use, delinquency and school related problems (Dryfoos, 1990) adolescents who live in low-income neighborhoods often are more sexually active and have higher adolescent pregnancy rates than adolescents who live in more affluent circumstances. This may be accountable for the higher rate of teenage pregnancy and motherhood in Nigeria. The precarious issue of baby homes operating in various part of Nigeria is a strong reason. The issue of self-regulation is another significant factor. The ability to regulate ones emotions and behaviour and parents-adolescents relationships are strong factors in controlling adolescents sexual behaviour. Rafaelli and Crockett (2003) in a longitudinal study conducted reported that a lower level of self-regulation at 12 to 13years of age was linked with a higher level of sexual risk taking four years later. Other researchers such as Kahn, Rosenthal, Succop, Ho, Ho and Burk (2002) found a relation between low self regulation and high sexual risk. Huebuar and Howell (2003) reported that sexual risk taking in adolescence was related to low parental monitoring and poor parent-adolescent communication.

On the issue of sexually transmitted infections (STIs), yearly 3million American adolescents (about one-fourth of those who are sexually experienced) acquire an STI (Centers for Disease Control and Prevention 2014). In a simple act of unprotected sex with an infected partner, a teenage girl has a 1percent risk of getting HIV, a 30 percent risk of acquiring genital herpes and a 50 percent chance of contracting gonorrhoea (Gler, 1999).

The developmental changes occurring in adolescents heralds the various behaviours of substance use and abuse. Once adolescents begin to take drug, drink alcohol and smoke cigarette, the addictive properties in these substances becomes extremely difficult to stop. Tucker, Ellickson & Klein (2003) reported that the risk factor of becoming a smoker are; having a friend who smoked having a weak academic orientation and experiencing low parental support. Thuston et al (1999) observed that smoking in the adolescent years causes permanent genetic changes in the lungs and forever increases the risk of lung cancer even if the smoker quits. The damage was much less likely among smokers in the study who started in their twenties. It was evident in the study that the early age of onset of smoking was more important in predicting genetic damage than how much the individuals smoked. Researchers have equally found that drug use in childhood or early adolescence has more detrimental long-term effects on the development of responsible, competent behaviour than when drug use occurs in late adolescence (Newcomb and Bentler, 1989) when adolescents use drugs to cope with stress, many young adolescents enter adult roles of marriage and work prematurely without adequate socio emotional growth and experience greater failure in adult roles.

Parents, peers and social support is important in preventing adolescents drug abuse (Hotton and Hans 2004; Wood and Fletcher, Stemberg and Williams-Wheeler (2004) reported that parental control and monitoring were linked with a lower incidence of problem behaviour by adolescents including substance abuse. Low parental involvement, peer pressure and associating with problem-behaving friends were linked with higher use of drugs by adolescents (Simons-Morton et al., 2001).

Also parents who were more involved in setting limits such as where adolescents went after school and what they were exposed to on TV and the internet, were more likely to have adolescents who did not use drugs (National Center for Addiction and Substance Abuse, 2001).

Research Rationale

There are reports on daily bases by casual observers, on radio, in print media and sophisticated electronics media about adolescents addictive behaviours such as what sexual behaviours like sexual promiscuity, harassment, coercion and a host of indecent sexual acts. Also there are report on adolescents abusing and misuse of substance, all these appears to be posing challenges of risk taking behaviours. All these misdemeanors experienced in various sectors of Nigeria appears to corroborate biological and psychological factors of developmental changes of these miniature adolescents. These hormonal increament that accompanies increament in height, weight and sexual maturation seems to be accountable for most of the illicit behaviours pervading Nigeria society. The psychological and sociological factors in the environment such as location of adolescents, parents, peer relationship cum adolescents relationship with parents and guardian could speak for the spate of addictive behaviours accountable for violence and restiveness rocking Nigeria. It appears as if most of these adolescents are acting under the influences of misuse of substances like alcohol and drug. These may be accountable for hydraheaded demon of violence defiling all weapons of sanitation in Nigeria.

The precarious situation of the prevalence of divorce, instability of homes, irregular distribution of wealth in Nigeria may be responsible for the adolescents addiction to heinous crimes in places like Ekiti State, Nigeria.

Methodology

The researcher made use of the descriptive research design of the survey type. The population for the study was made up of all the adolescents in Ado-Ekiti local government area of Ekiti State, Nigeria. 150 adolescents were randomly selected using multistage sampling techniques also involving stratified sampling technique. A research instrument titled "Addictive Behaviour Questionnaire" (ABQ) was used for gathering data. The face and content validities of the instrument was ensured through experts in Human Kinetics, tests and measurement and guidance and counselling departments. The reliability coefficient of the instrument was estimated at 0.75 using test retest reliability method and Pearson product moment correlation analysis. The data generated were analysed using inferential statistics. The hypothesis postulated was tested using inferential statistics of t-test and Analysis of Variance (ANOVA).

Hypothesis 1: Adolescents family structure will not significantly influence their addictive behaviour

2. Adolescents economic status will not significantly influence their addictive behaviour.

Hypothesis 1

Table 1: t-test analysis of family structure and adolescent's addictive behaviour

Group	N	Mean	S.D	df	tcal	t-table
Stable	47	31.47	2.66	1.48	5.103	1.960
Unstable	103	33.71	2.42			

$P < 0.05$

Table 1 shows that t-cal (5.103) is greater than t-table (1.960) at 0.05 level of significance. The null hypothesis adolescents family structure will not significantly influence adolescents addictive behaviour is rejected. This implies that family structure of adolescents will significantly influence their addictive behaviour.

Table 2: Oneway ANOVA of adolescent's economic status and addictive behaviour

Source	Ss	df	Ms	t-cal	t-table
Between Groups	627.85	2	313.92	101.39	3.04
Within Groups	455.15	147	3.096		
Total	1082.99	149			

$P < 0.05$

Table 2 shows that t-cal (101.39) is greater than t-table (3.04) at 0.05 level of significance. The null hypothesis adolescent economic status will not significantly influence adolescents addictive behaviour is rejected.

Discussion

The finding family structure of adolescent significantly influence their addictive behaviour was in agreement with; Allen, Hausen Borman-Spurrell (1996) finding, that securely attached adolescents were less likely than those who were insecurely attached to engage in addictive and problem behaviours such as juvenile delinquency and drug abuse also Kobak (1999); Laibe, Carlo and Raffaelli (2000) reported that securely attached adolescents had better peer relations than their insecurely attached counterparts.

Also the findings economic status of adolescents significantly influence adolescents addictive agrees with the report of Council of Economic Advisors (2000) that adolescents who did not eat dinner with a parent five or more days a week had dramatically higher rates of smoking, drinking marijuana use, getting into fights and initiation of sexual activity. Mounts (2002) reported that parents who played an active role in monitoring and guiding their adolescents development were more likely to have adolescents with positive peer relations and lower drug use than parents who had a less active role.

Recommendations

Based on the findings it is recommended that parents should endeavour to enhance stability in their homes to enhance proper development of adolescents and reduce addictive behaviour. Parents and adolescents care givers should make provision for the financial needs of the adolescents to ensure their security and identity needs. This will reduce the addictive related peer influences and prevent them from seeking solace in external influences that could be injurious to their development.

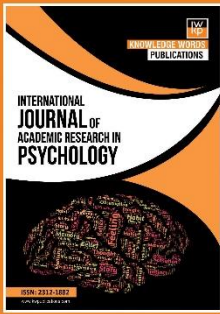
Significance of the Study

This study could benefit the would be adolescents, adolescent parents, guardians, students teachers, counsellors school administrators, proprietors, curriculum planners and adolescents care givers. The would be adolescents and adolescents could learn and understand their challenges and coping mechanisms for these challenges. Parents, guardians, teachers and counsellors could understand learn, teach and counsel these adolescents about the determinants of addictive behaviours and provide coping mechanisms for these challenges to live a healthy life. The curriculum planners could incorporate areas that would benefit the students to the national curriculum to be implemented by school administrators and school proprietors across the three tiers of government in Nigeria.

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The Coping Strategies among Student-Athletes who have to Let Go their Academic Goal

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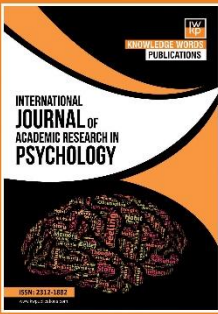
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The Coping Strategies among Student-Athletes who have to Let Go their Academic Goal

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Abstract

The main purpose of this study was to examine the relationship of the coping strategy and level of representations of student-athletes at university level. More specifically, it also investigates the relationship of high school level of sport representations and university level of sport representation. A sample of 307 (female-213; male-94) university students-athletes in one of the public university in Malaysia were randomly selected for this study. The age of the student-athletes ($M=22.09$, $sd=1.35$) Out of the number, 210 represented college dormitory, 51 represented university at National level, and 46 represented state at national level, and 6 representing Nation at International level. The Athletic Coping Skills Inventory – 28 was used to measure the psychological coping skills for athletes. The instrument consisted of a 28-item scale measuring seven classes of sport-specific psychological coping skills including confidence, goal setting, coping with adversity, freedom from worry, coachability, concentration, peaking under pressure, and goal setting. Results shows that all of the seven coping strategies were significantly correlated with the four level of university representations. The major findings found that a high correlation between the goal setting and confidence level of the athletes. Another findings also found that the goal setting and confidence level also moderately correlated with coping with adversity. However, a weak relationship was found between high school sports representation and university level of sports representations. Results were further discussed and suggestions for future research also suggested in this paper.

Keywords: Coping Strategy, University Student-athletes, Coping with Adversity, Confidence and Goal Setting.

Introduction

The ability of using psychological skills has major impact on athletes to perform at their best because it allow athletes to deal with pressure, distractions, and adversity that can lower their capacity to performance (Clough & Strycharczyk, 2012; Omar-Fauzee et al., 2013). Thus, no matter how well one had trained themselves during practice, they still have a tendency to think of threat and afraid of losing which later on will make them losing their focus and perhaps will make them feel unsecure of their ability (Dalkhoter, 2008). Likewise, Gould, Dieffenbach, and Moffet (2002) also identify that successful Olympian required high mental strength which nurture them to perform better in stressful competitive surroundings. Thus, it is sport psychologist duty to help those who unable to control their emotions or unable to focus during the game to become more stable indeed (Weinberg & Gould, 2011). Relatively, sport psychologist should work hand-in-hand with coaches and athletes to assure that what athletes have practiced during training really transpire during the competition (Ferrante, Etzel, & Lantz, 2002). As for those developed countries that understand the needs of sport psychologist for the team, it should not be so hassle, however for developing countries which still have so many ignorant coaches about the benefit of the sports psychologist is then a fuss. Therefore, no matter what the situation is, the sport researchers should conduct more research to ensure that coaches will understood the important of psychological tools in training and competition. Thus, the study on Malaysian student-athletes is a positive step toward acknowledging the needs of psychologially skills for athletes (Omar-Fauzee, et al., 2013).

According to Sheard (2010) athletes should learned and be taught the process of mental toughness and coping strategy in order to assure that their competency can sustain at appropriate level, especially when compete at International level. At the elite competition, athletes may have same physical capabilities, same level of strategy, and high level of technical ability, but only with slight mistake of mental attention it can create a distrounsness situation for the individu (Hoggs, 2002; Moran, 2007). Therefore, high level of mental strength training to cope themselves in stressful situation will enable them to be world class athletes. Therefore, it is a need that athletes learned and trained themselves with sports psychologist on how to perform themselves (Connaughton, Hanton & Johns, 2009). This intention should be started at early stage before they becoming world class athletes. Perhaps, by investigating the university student-athletes on coping strategies is the right move towards developing a great athletes.

Futrthermore, study by Omar-Fauzee, et al., (2014b) found that the main problems with student-athletes are nervous before games, avoiding injury, spectators disruptions, and personal problems. All of this stressful conditions, perhaps due to lack of readiness to cope with the unforeseen circumstances that they might faced. Thus, unable to cope these competititive pressure before the game will conceive them to perform poorly, incapable to study the game, and unable them to change strategy in a split-second (Omar-Fauzee, Daud, Abdullah, & Rashid, 2009). In any competition, athletes also have to bare in mind that they also have to confront and cope with losing. On the other hand, Omar-Fauzee, Abd-Latif, Tajularipin, Manja and Rattanakoses (2011) found that athletes who lost their game also quest for social support and psychological skills to cope with their emotional frustration. Therefore, the usage of psychological skills including coping strategy of winning or losing,

concentration, goal setting, imagery, and self-confidence will help to raise their motivation in order to maintain their peak performances (Rattanakoses, Omar-Fauzee & Soh, 2009). These emotional and psychological monitoring were critically required, especially when athletes are in a condition where they feel insecure, threaten, fearful, nervous, and uptight to perform at their best (Dominikus, Omar-Fauzee, Abdullah, Meesin & Choosakul, 2009). Moreover, student-athletes who are prepared and equipped themselves with coping strategies and mental toughness are more complacent to perform, qualify and confidence to compete (Loehr, 1986; Moran, 2007; Omar-Fauzee et al., 2010). In the case of the university student-athletes, they are also confronted with workload of academic demands that one has to fulfill which includes attending classes and labs, prepare themselves with project papers and assignments, and of course passing the examination (Ferrante, et. al., 2002; Hickey & Kelly, 2005). The balancing both the sports performance and academic achievements are difficult task that student-athletes have to confront. Consequently, Cosh and Tully (2014) research on Australian student-athletes also revealed that the essential academic goal for student athletes is *all I have to do is just pass*. In other words, they have to sacrifice their educational success in order to integrate both sports and academics. Thus, this academic pursuit for excellence had made them more stressful to face the sports competition. To overcome it, some have to *let go* the academic pressure while competing. More flatten, they also have to overcome the competition pressure like other elite athletes in order to success in their games. Thus, student-athletes who are carry two big responsibilities (i.e., academic pursuit and sporting competence) should also trained themselves on how to cope with these stressful situation (Jobling & Boag, 2003). Consequently, this study will examine the relationship of coping strategy of student-athletes and their level of representation during their study at the university. This is important because the findings will help coaches and athletes to strategise their training program (Omar-Fauzee, et al., 2012; Omar-Fauzee, 2014a).

Methodology

Sample

A sample of 307 (male-94; female-213) university students-athletes in one of the public university in Malaysia were randomly selected for this study. The age of the student-athletes ($M=22.09$, $sd=1.35$). Out of 310 respondents, 210 represented college dormitory, 51 represented university at National level, and 40 represented state at national level, and 6 representing Nation at International level. They are involved in both the team and individual sports representing a wide variety of sports (i.e. swimming, badminton, netball, softball, rugby, track and field, bowling, soccer, futsal, volleyball and field hockey).

Instrumentation

The questionnaire was divided into two parts, namely: demographic variables; and the athletic coping skills inventory – 28.

Demographic Variables

The questionnaire also contained items that identified the gender, age, race, and level of sports participation during high school, level of sports representation in the university.

Athletic Coping Skills Inventory – 28

In this study, the Athletic Coping Skills Inventory – 28 (ACSI-28; Smith, Schultz, Smoll, & Ptacek, 1995) was used to measure the psychological coping skills for athletes. The instrument consisted of a 28-item scale which tend to measure seven coping skills of sport-specific which includes concentration, peaking under pressure, confidence, freedom from worry, coping with adversity, goal setting, and coachability. The respondents were asked to respond to each statement by indicating how often they experienced different situations using a 4 point Likert-like scale (0 = almost never to 3 = almost always). Example for goal setting skill; *On a daily or weekly basis I set very specific goals for myself that guide what I do.* Each The scales were then summed to yield a personal coping resource score. The internal reliability as reported by original authors, Smith, Schutz, Smoll and Ptacek (1995) were found to be internally consistent with alpha croncbach levels ranging from .62 to .78 and a total (personal coping resources) scale alpha of .86.

Figure 1: Terms and definitions of ACSI – 28 psychological coping skills

Sub-scales	Descriptions and example of question
Freedom from Worry	Does not put pressure on him/herself by worrying about performing poorly or making mistakes; does not worry about what others will think if he/she performs poorly. <i>(I worry quite a bit about what others will think about my performance*)</i>
Coping with Adversity	Remains positive and enthusiastic even when things are going badly; remains calm and controlled; can quickly bounce back from mistakes and setbacks. <i>(I remain positive and enthusiastic during competition, no matter how badly things are going)</i>
Peaking Under Pressure	Is challenged rather than threatened by pressure situations and performs well under pressure; a clutch performer. <i>(I tend to perform better under pressure because I think more clearly)</i>
Goal Setting	Sets and works towards specific performance goals; plans and mentally prepares him/herself for competition and clearly has a 'game plan' for the competition. <i>(I tend to do lots of planning about how to reach my goals)</i>
Concentration	Not easily distracted; able to focus on the task at hand in both practice and competitive situations, even when adverse or unexpected events occur. <i>(It is easy for me to direct my attention and focus on a single object or person)</i>

Confidence	Is confident and positively motivated; consistently gives 100% during practice and competitions and works hard to improve his/her skills. <i>(I feel confident that I will perform well)</i>
Coachability	Open to and learns from instruction; accepts constructive criticism without taking it personally or becoming upset. <i>(If a coach criticizes or yells at me I correct the mistake without getting upset about it)</i>

Notes: *Reverse marks

Source: Adapted from Smith, R. E., & Christensen, D. S. (1995). Psychological skills as predictors of performance and survival in professional baseball. *Journal of Sport and Exercise Psychology*, 17, 399-415.

Procedure

The permission was asked from the Director of Sports Center of the university involved before conducting this research. Once approved, the researcher with the help of coaches and student leaders of the specific sports conducting the research at the playing field and courts. The respondents was briefly explained of the objective of the research and they were also notify that they can quit at anytime during the answering session if they feel uncomfortable. It took approximately 25 minutes to answer the Malay translated questionnaire. This Malay translation was validated by English expert from the first author university. The completed set of questionnaire answered was immediately collected after the respondents satisfied with their answered.

Analysis of Data

All the data were analyzed using the Statistical Package of Social Sciences (SPSS) program software version 19.0. The objective of this study is to examine the relationship of coping strategy of student-athletes and their level of representations during their study at the university. The descriptive statistic (Mean and standard deviation) was employed to identified the demographic of the respondents. In addition, the pearson correlation measurement was used to examine the significant relationship among the level of participation and coping strategies of stident-athletes.

Results

Result obtained from the study shows that out the 307 respondents; 213 are male and 94 female student-athletes. They are divided into 210 students representing at college level, 51 representing university at national level, 40 representing state at National level, and only 6 representing Nation at International level. There are races/ethnic who participate in this study that are; 217 Malays, 42 Chinese, 39 Indian, and 9 others. The mean age of the respondents are (M=22.09, sd=1.35). All of the coping strategies have the internal reliability between .65-.80 which is appropriate. On the other hand, those who represented National team (6) at International level, do representing state (1) and Nation (5) during their high school (Table 1). However, most student-athlete who representing state (43) and Nation (7) during high school only did participate at college

level only. The relationship between high school and university level of participations show significantly correlated ($r=.28, p<.05$), but with a weak relationship.

Results also show that the correlation between the level of participation among university student-athletes and coping strategies are significantly correlated with each other. The confident ($r=.29, p<.05$), goal setting ($r=.33, p<.05$) and freedom from worry ($r=.39, p<.05$) show slightly poor significant. However, coping with adversity ($r=.42, p<.05$), peaking under pressure ($r=.48, p<.05$), and concentration ($r=.41, p<.05$) showed middle correlation, and coachability ($r=.55, p<.05$) was the highest correlation among them (Table 2).

Table 1. *Sports representations during high school*

	1	2	3	4	5	Total
Representing College	24	32	104	43	7	210
Representing University/state level	2	8	23	16	2	51
Representing Malaysian University	0	2	21	17	0	40
Representing Nation at International	0	0	0	1	5	6

Notes: 1. Representing house at school level, 2. Representing school at district level, 3. Reresenting district at state level, 4. Representing state at national level, and 5. Representing Nation at International level.

Figure 2. *Sports Representative during high school and university*

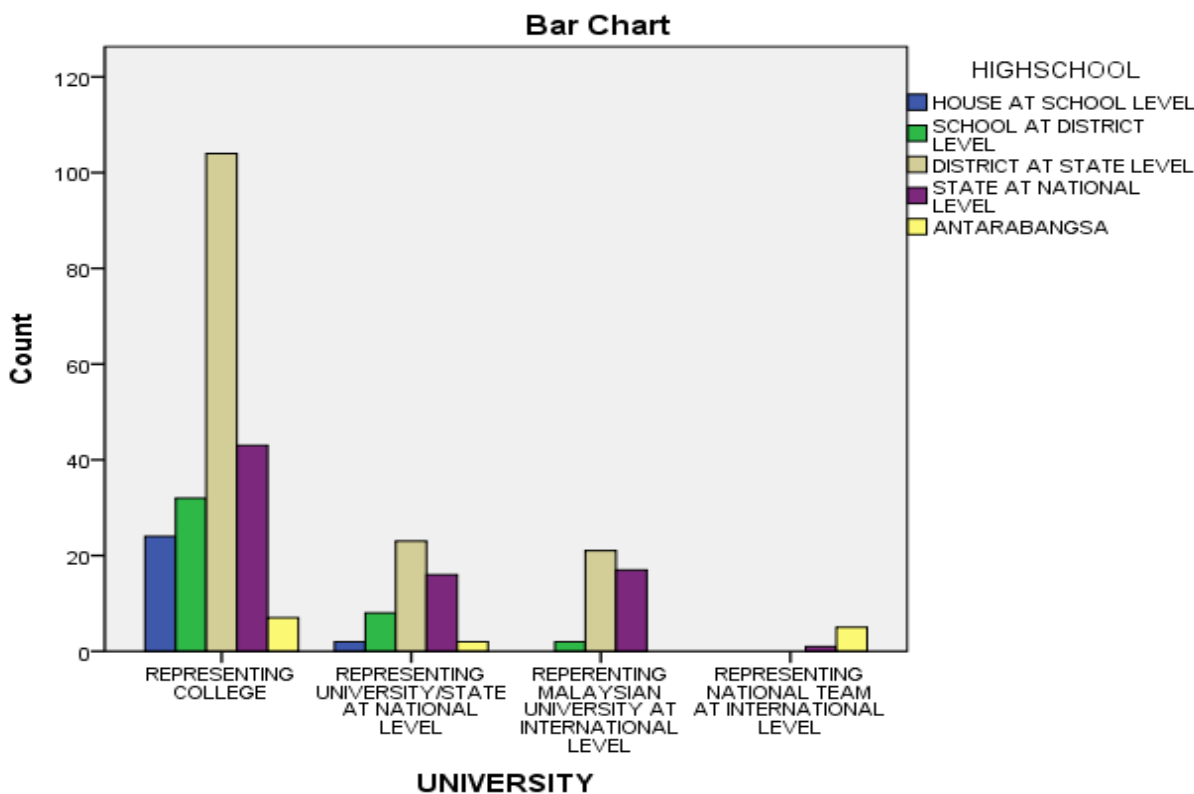


Table 2: The Correlations of level of University Representations and the Coping Strategies among the Student-athletes.

Variable	1	2	3	4	5	6	7	8
1.University participation	1	.42*	.48*	.33*	.41*	.39*	.29*	.55*
2.Coping with Adversity	.42*	1	.52*	.62*	.46*	.43*	.62*	.56*
3.Peaking under pressure	.48*	.52*	1	.50*	.47*	.45*	.47*	.56*
4.Goal setting	.33*	.62*	.50*	1	.44*	.41*	.74*	.48*
5.Concentration	.41*	.46*	.47*	.44	1	.44*	.38*	.54*
6.Freedom from Worry	.39*	.43*	.45*	.41*	.44*	1	.36*	.54*
7.Confidence	.29*	.62*	.47*	.74*	.38*	.36*	1	.46*
8.Coachability	.55*	.56*	.56*	.48*	.54*	.54*	.46*	1

Notes: * $p < .05$

1. representing at college level, 2. representing university at national level, 3. representing state at National level, and 4. representing Nation at International level.

Conclusion

The purpose of this paper is to examine the relationship between the level of representations and coping strategy employed by student-athletes at a particular public university in Malaysia. In order to understand their high school sport behavior, this study had also examined the relationship between their high school representations in sports as compare to their recent representation at the university as student-athletes. Results show that there are a weak correlation between high school sports representation and university representation. Additionally, it has identify that only those who represented high school at state and National level will continuously representing Nation during their university year. This shows that their interest to pursue their intention for participation in sports during university was still deep and they continuously expand their behavior even at university level. Those who have experienced playing during their adolescent also show better mental training skills in their recent sports (Sadeghi et al., 2010). Moreover, those who representing sports at higher level during high school, display lower anxiety level as compare to those who don't (Omar-Fauzee et al., 2008). However, further study should be conducted because it is curious to find out that half of student-athletes who used to representing National team during high school only representing college level in the university. Is it because of academic pressure or their inability to cope with the sport program? Or perhaps, is it because they have change interest? Perhaps, study by Cosh and

Tully (2014) was to be considered where they found that most student-athletes declining themselves in taking part at higher level. Cosh and Tully identified that one of the main reasons that potential student-athletes quitting from sports participation are unable to cope with the tendency of failure in completing their tertiary education.

However, this study also found that the trend of participating sports at university was still due to their high school interest, whereby high number of student-athletes who used to represented state and district level are continuously representing university and Malaysian University team. Thus, this shows that those who used to be active during adolescent will keep on doing it after finishing schools. Perhaps, due to the good facilities of sports and well managed sports program at university level have made them interest to keep on active even with academic pressure (Omar-Fauzee, Yusof, & Zizzi, 2009). On the other hand, the more involvement the athletes were, the more capable they can cope with the psychological threat that causing encumbrance to compete (Crust & Azadi, 2010). Moreover, Sheard (2010) also suggested that the experience individual were more confidence and more focus when compete in a game. However, the reason of why those who only representing house level at high school were still remain participating at lower level of representation need also to be examined in order to understand their participatory behavior.

It is interesting to find out that there are good correlation between the goal setting and confidence level student-athletes. This shows that the better the goal setting created by the student-athletes the more confidence they were. Perhaps, the attitude of setting up their daily or weekly basis such as *'On a daily or weekly basis I set very specific goals for myself that guide what I do'* had been able to improve their confidence level because they are well planned and know what to do (Moran, 2007). In other words, with daily goal-setting log it will guide the individual to be more focus on the task that they have to deliver. Therefore, the student-athletes should developed a proper goal-setting diary in order to improve their confident level in sports. According to Omar-Fauzee et al., (2013) apart of being positive, goal setting is another major contributions toward mental toughness among athletes that need to be focused by athletes. Furthermore, with proper planning of what to do next will help the athlete to identify the needs they should do next (Hogg, 2002; Weinberg & Gould, 2011). By proper and regular planning, it will also helps athletes to forsee the future problems and thus, it will improve their confidence level because they are ready to face whatever circumstances (Dahlkoetter, 2008). Therefore, this findings also suggest that student-athletes should learned on how to create the log or diary of goal setting to fulfil their psychological needs in order to perform in sports (Kada et al., 2011).

Another interesting finding is that the confidence and goal setting also have moderately high correlation with coping with adversity. Thus, the study shows that if the individual athlete has high confidence and goal setting their ability to cope with adversity is higher. Therefore, the *resilience program* as suggested by Omar-Fauzee et al., (2014b) seem to be in the same direction with the findings. Thus, it shows that no matter how worst the catastrophe is to the athletes during game, it can be conquered by the athletes if they have higher confidence level as well as exceptional goals (Omar-Fauzee et al., 2009). Both of these psychological skills did not appear suddenly, but it has to be learned and trained properly in order to helps athlete improve their performances. Thus, sports psychologist should involved with the team in helping athletes to perform at their best without distractions (Omar-Fauzee, et al., 2012). Perhaps, more research on culture based circumstances

should be introduced to Malaysian and Asian student-athletes so that their capability of maintaining higher performances sustained at International level (Omar-Fauzee, et al., 2013).

Additionally, this study also has its limitations that should be attained. The first limitation is that the research is only focus to a particular university in Malaysia and cannot be generalized entirely with other university student-athletes. Therefore, more research should be conducted to more universities for better understanding of this special group of people who have to 'let go their academic goals' in order to fulfill their sporting needs. Perhaps, a specific 'coping strategy inventory' that focused only on student-athletes should be created in the future. Furthermore, a longitudinal study over a period of one year involving only the student-athletes should also be considered. This suggestion is also considering the proposition made by Omar-Fauzee, et. al., (2012) who have suggested that more research on Asian athletes should be conducted in order to help them to improve their coping ability when dealing with stressful competitive environment. In addition, the Asian athletes also should be exposed to psychological skills by sports psychologist in order to create a better mental toughness among them.

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