

Adolescents' Life Satisfaction in Selangor, Malaysia: The Effect of Demographic Differences

Chiong Hoe Nee¹, Siti Nor Yaacob², Rozumah Baharudin¹ & Tan Jo-Pei³

¹ Department of Human Development and Family Studies, Faculty of Human Ecology, Universiti Putra Malaysia, Malaysia

² Family, Adolescent and Child Research Center of Excellence (FACE), Faculty of Human Ecology, Universiti Putra Malaysia, Malaysia

³ Department of Social Care & Social Work, Faculty of Health, Psychology & Social Care, Manchester Metropolitan University, United Kingdom

Correspondence: Chiong Hoe Nee, Department of Human Development and Family Studies, Faculty of Human Ecology, Universiti Putra Malaysia, Malaysia. E-mail: nicole_hoenee@hotmail.com

Received: May 11, 2015 Accepted: July 9, 2015 Online Published: January 12, 2016

doi:10.5539/ass.v12n2p1

URL: <http://dx.doi.org/10.5539/ass.v12n2p1>

Abstract

This present study aims to describe the level of overall and domains-specific life satisfaction and to determine how differences in demographic variables can influence life satisfaction among adolescents in Selangor, Malaysia. The sample of the study consisted of 416 school-going adolescents, aged between 14 to 17 years old, who were selected through multi-stage cluster sampling from 12 secondary schools. The findings showed that adolescents generally reported positive level of life satisfaction. Differences in life satisfaction by age, gender and family structure were compared by t-test analysis. Younger adolescents display higher life satisfaction compared to older adolescents. Males reported higher level of life satisfaction in school domain and lower score in living environment domain compared to females. Respondents who were living in intact family arrangement also reported to have higher life satisfaction than those who were living with other types of family arrangements. In conclusion, cognitive judgment of adolescents' life satisfaction differ with respect to their biological age, gender, and family structure.

Keywords: adolescent, life satisfaction, age, gender, family structure

1. Introduction

Life satisfaction incorporates wide range of functioning (Suldo & Huebner, 2006). It is an important subjective factor for health and is defined as the cognitive judgment of the quality of a person's life as a whole or with specific domains (Deiner et al., 1999). Specifically, Tumkaya, Aybek, and Celik (2008) stated that life satisfaction indicates the actual comparison result between one's expectations with their current state, covering all aspects of life, and not just a specific fulfillment for a situation.

Life satisfaction is considered as a state variable, which captures something present and contextual but it is not a permanent attribute of one person (Hultell & Gustavsson, 2008). Although life satisfaction of a person is likely to alter over results of different life events, many life circumstances remain stable over time and thus making life satisfaction cognitive judgments to have certain level of continuity (Huebner, Funk, & Gilman, 2000). People who perceived higher level of life satisfaction generally experience more positive feelings than negative ones (Suldo & Huebner, 2006).

Satisfaction of one's life can be measured through unidimension or multidimension measurements (Lewis, 2010). Unidimensional measure derives a single score whereas in multidimensional approach, life satisfaction is calculated by cognitive appraisals corresponding to the domains, which can be subsumed. Huebner (1994) proposed five important domains of life satisfaction which include family, school, self, friends, and living environment. Multidimensional life satisfaction assessments enable more focused diagnostic, prevention, and intervention effort (Huebner, 2001).

Adolescents who have low levels of life satisfaction are predicted to exhibit internalising and externalising behaviors in the future (Haranin, Huebner, & Suldo, 2007). They also tend to involve themselves more in

substance abuse and delinquency (Sun & Shek, 2010). Life satisfaction is also a significant predictor of the development of suicidal ideation in adolescents (Park, Koo, & Schepp, 2005). Past study which was conducted among 13 to 18 years old adolescents even revealed that higher suicide attempt was significantly related to lower level of life satisfaction (Valois, Zullig, Huebner, & Drane, 2004).

As human beings are interdependent to one another to survive in an ecosystem, the bioecological theory by Urie Bronfenbrenner (2005) suggests that human development is strongly influenced by the person himself and the social contexts in which human live. The person is used as a reference point for the centre of the ecological model. Demographic variables of the person such as age and gender appeared to be at the centre of the model and interact with other interconnected systems, such as family structure. These demographic variables had been studied but the findings were inconsistent.

Therefore, this study aims to describe the level of overall and domains-specific life satisfaction among adolescents in Selangor, Malaysia and determine how life satisfaction varies by demographic variables. It is hypothesized that adolescents' life satisfaction differ between younger adolescents and older adolescents, between male and female, and between adolescents with different family structure.

2. Research Methodology

2.1 Location

The present study utilized a quantitative approach to examine life satisfaction among adolescents in urban and rural areas in Selangor, Malaysia. Selangor is the richest state in Malaysia in terms of gross domestic product (GDP) and also the most heavily populated state in Malaysia, having the highest number of students among other states (EMIS, 2011). Based on statistics from Department of Social Welfare (2012), number of uncontrolled children's cases appeared to be highest in Selangor with 139 cases in 2011. This statistic gave an overview of the possibility of dissatisfaction in life among adolescents in Selangor, as life dissatisfaction often linked to children with problem behaviors.

2.2 Participants

The participants were recruited through multi-stage cluster sampling. Three districts out of ten districts in Selangor were randomly selected. The selected districts were Petaling Perdana, Hulu Langat, and Kuala Selangor. A total of twelve secondary schools, four schools in each district were randomly chosen. For each school, a class of students from either Form 2 or Form 4 was randomly selected. The sample of the study consisted of 416 school-going adolescents (45.0% male and 55.0% female), aged between 14 to 17 years old from 12 secondary schools. Their average age was 15 years old (S.D. = .995). Majority of the respondents were Malay (71.9%), followed by Chinese (13.9%), Indian (13.0%), and others (1.2%).

2.3 Instrumentation

Adolescents' life satisfaction was measured with abridged 18-items version of Multidimensional Students' Life Satisfaction Scale (MSLSS) by Sawatzky et al. (2009). The original 40-item MSLSS was developed by Huebner (2001). Respondents were asked to rate each item based on their experiences in the past several weeks using 6-point Likert scale with the following choices: 1 = strongly disagree, 2 = moderately disagree, 3 = mildly disagree, 4 = mildly agree, 5 = moderately agree and 6 = strongly agree. Items in the same domain were summed to obtain family, friends, self, school, and living environment life satisfaction respectively. Overall score was obtained by summing the 18 items altogether. Higher score indicates higher life satisfaction. For this current study, reliability for life satisfaction scale ranged from .535 to .818 for each domain and .865 for the overall scale.

2.4 Data Analyses

Data were entered into Statistical Package for Social Science (SPSS) to be analyzed. Descriptive statistics were used to describe the level of life satisfaction and t-test was used to determine differences in life satisfaction by age, gender, and family structure.

3. Results

3.1 Descriptive Statistics

Table 1 depicts adolescents' responses to items on life satisfaction from family, school, self, friends and living environment domains. From 6-point Likert scale, the responses were categorized into two groups, named "agree" and "disagree". More than 90% of the respondents agreed to all the items in friends domain, and more than 85% and 80% of them agreed to all items in family and living environment domain respectively. These responses showed that the respondents were highly satisfied with their family life, relationship with friends, and their living

environment. For school domain, 30% of the respondents disagreed to “I look forward to going to school” item but about 90% agreed that they learn a lot at school. Among all the items, “I think I am good looking” from self domain had the lowest percentage of agreement, which was 64.4%, indicating a large proportion of them was dissatisfied with their physical appearance. The other items from the same domain showed 70% and above of agreement.

Table 1. Adolescents’ responses on life satisfaction (N=416)

Item	Mean	S.D.	Disagree n (%)	Agree n (%)
Family				
My family is better than most.	4.79	1.21	58 (13.9)	358 (86.1)
My parents treat me fairly.	5.10	1.20	50 (12.0)	366 (88.0)
Members of my family talk nicely to one another.	4.92	1.24	55 (13.2)	361 (86.8)
My parents and I do fun things together.	4.85	1.25	61 (14.7)	355 (85.3)
School				
I look forward to going to school.	4.13	1.55	125 (30.0)	291 (70.0)
School is entertaining.	4.42	1.39	97 (23.3)	319 (76.7)
I learn a lot at school.	4.97	1.14	44 (10.6)	372 (89.4)
I enjoy school activities.	4.67	1.35	66 (15.9)	350 (84.1)
Self				
There are lots things I can do well.	4.66	1.10	59 (14.2)	357 (85.8)
I think I am good looking.	3.86	1.46	148 (35.6)	268 (64.4)
I like myself.	5.22	1.05	32 (7.7)	384 (92.3)
Most people like me.	4.19	1.21	105 (25.2)	311 (74.8)
Friends				
My friends are nice to me.	5.07	1.04	35 (8.4)	381 (91.6)
My friends will help me if I need it.	5.07	1.00	24 (5.8)	392 (94.2)
I have a lot fun time with my friends.	5.46	0.79	9 (2.2)	407 (97.8)
I have enough friends.	5.09	1.11	33 (7.9)	383 (92.1)
Living environment				
I like my neighbourhood.	4.65	1.33	81 (19.5)	335 (80.5)
I like where I live.	5.33	1.04	32 (7.7)	384 (92.3)

Distribution of adolescents’ life satisfaction based on overall life satisfaction and specific domains of life satisfaction were presented in Table 2. The mean of overall life satisfaction was 86.44 with standard deviation of 11.95, in which 47.8% had high score. As there is no existing benchmark for the scale, the life satisfaction score utilised the median score to separate the score into ‘high’ and ‘low’ for interpretation. Half or slightly less than half of the respondents got low score for overall life satisfaction and all the domains. Satisfaction with family (50.0%) yielded the highest proportion of high score, followed by living environment (49.5%), friends (47.6%), self (45.7%), and school (44.7%).

Table 2. Distribution of adolescents' life satisfaction (N=416)

Variable	n (%)	Mean	Median	S.D.	Min.	Max.
Overall life satisfaction		86.44	88.00	11.95	51	108
Low score (≤ 88)	217 (52.2)					
High score (> 88)	199 (47.8)					
Life satisfaction-family		19.45	20.50	3.78	8	24
Low score (≤ 20.5)	208 (50.0)					
High score (> 20.5)	208 (50.0)					
Life satisfaction-school		18.19	19.00	4.39	6	24
Low score (≤ 19)	230 (55.3)					
High score (> 19)	186 (44.7)					
Life satisfaction-self		17.92	18.00	3.55	7	24
Low score (≤ 18)	226 (54.3)					
High score (> 18)	190 (45.7)					
Life satisfaction-friends		20.70	21.00	2.95	12	24
Low score (≤ 21)	218 (52.4)					
High score (> 21)	198 (47.6)					
Life satisfaction-living environment		9.99	10.00	1.97	4	12
Low score (≤ 10)	210 (50.5)					
High score (> 10)	206 (49.5)					

3.2 Inferential Statistics

Table 3 displays the results of t-test analysis on the differences in adolescents' life satisfaction by age. Respondents who were 14 and 15 years old were categorized as younger group, while 16 and 17 years old were older adolescents. The result showed that the two age groups of respondents had significant differences in overall life satisfaction ($t = 3.03, p \leq 0.01$). Younger adolescents (mean = 88.21) had higher overall life satisfaction compared to older adolescents (84.70). In domains-specific, younger and older respondents differ significantly in school life satisfaction ($t = 2.79, p \leq 0.01$) and living environment satisfaction ($t = 4.41, p \leq 0.001$). Younger adolescents display higher satisfaction with their school and living environment.

Table 3. Differences in adolescents' life satisfaction by age (N=416)

Variable	Mean		t	p
	Younger (n=206)	Older (n=210)		
Overall life satisfaction	88.21	84.70	3.03	.116
Life satisfaction-family	20.00	19.30	1.92	.056
Life satisfaction-school	18.79	17.60	2.79	.006
Life satisfaction-self	18.07	17.77	0.88	.379
Life satisfaction-friends	20.94	20.46	1.68	.094
Life satisfaction-living environment	10.41	9.58	4.41	.001

Table 4 shows the differences in adolescents' life satisfaction by gender. The result demonstrated that female adolescents obtained significantly higher life satisfaction in school domain compared to male adolescents ($t = 2.81, p \leq 0.01$). On the other hand, male adolescents displayed higher life satisfaction in living environment domain than females ($t = -2.18, p \leq 0.05$).

Table 4. Differences in adolescents' life satisfaction by gender (N=416)

Variable	Mean		t	p
	Male (n=187)	Female (n=229)		
Overall life satisfaction	85.50	87.20	-1.45	.411
Life satisfaction-family	19.49	19.77	0.75	.452
Life satisfaction-school	17.52	18.73	2.81	.005
Life satisfaction-self	17.88	17.95	0.19	.852
Life satisfaction-friends	20.39	20.95	1.94	.051
Life satisfaction-living environment	10.22	9.80	-2.18	.030

Table 5 represents the differences in adolescents' life satisfaction by family structure. Family structure was grouped into intact and non-intact. The t-test result showed that overall life satisfaction had significant differences between adolescents staying in intact family and non-intact family ($t = 2.22, p \leq 0.05$). Adolescents with intact family arrangement demonstrated higher mean of 86.84 compared to non-intact (mean = 82.30). The same t-test result applied to family life satisfaction ($t = 2.01, p \leq 0.05$) and living environment life satisfaction ($t = 2.72, p \leq 0.01$).

Table 5. Differences in adolescents' life satisfaction by family structure (N=416)

Variable	Mean		t	p
	Intact (n=379)	Non-intact (n=37)		
Overall life satisfaction	86.84	82.30	2.22	.027
Life satisfaction-family	19.76	18.46	2.01	.045
Life satisfaction-school	18.29	17.22	1.41	.158
Life satisfaction-self	17.97	17.43	0.87	.384
Life satisfaction-friends	20.74	20.30	0.86	.389
Life satisfaction-living environment	10.10	8.89	2.72	.010

4. Discussion

In the present study, majority of the adolescents agreed to all items in multi-dimensional scale of life satisfaction. The tendency in reporting positive overall and domain-specific life satisfaction is consistent with international studies (Raboteg- Saric, Brajsa-Žganec, & Šakic, 2008; Park & Huebner, 2005; Nickerson & Nagle, 2004) and local study (Siti Nor, Tan, Tan, & Rumaya, 2012). However, in terms of categories, the data was negatively skewed with more number of adolescents having low score of life satisfaction.

Current research demonstrated that younger adolescents display higher satisfaction with their overall life satisfaction, school, and living environment. The result is in line with study by Park (2005) in which life satisfaction was found to decrease as age increases. Past research had showed inconsistency in explaining the influence of age towards life satisfaction. Life satisfaction has been found to decrease during adolescence in a study of German adolescents between 11 to 16 years old (Goldbeck, Schmitz, Besier, Herschbach, & Henrich, 2007). According to the researchers, decreasing life satisfaction is considered a normal developmental phenomenon as adolescence is at the breakdown stage of the former framework of life and thus decreases life

satisfaction. However, contradict findings showed no significant changes as age increases (Huebner et al., 2004; Shek, 2005). Therefore, this study is important to contribute to existing literature in Asian context.

Besides, this study also showed that male had higher level of life satisfaction in school domain whereas females had higher level of life satisfaction in living environment domain but no significant difference was found in overall life satisfaction and other domains. Similarly, no significant gender difference in life satisfaction was found in some past studies (Gilman & Huebner, 2006; Piko & Hamvai, 2010) while others reported significantly higher level of life satisfaction among males than females (Goldbeck, Schmitz, Besier, Herschbach, & Henrich, 2007; Salmela-Aro & Tynkkynen, 2009; Valois et al., 2004).

Hormonal regulation can explain the gap between boys and girls in terms of perceived life satisfaction. Girls have more striking physical changes during puberty and may feel more imbalanced in their well-being. However, not all girls are effected by hormonal regulation. Females are also conflicted to live in gender stereotypes in everyday life (Kimberling & Ouimette, 2002). Although they are usually socialized to be emotionally expressive and nurturing, they are viewed as inferior to males. Another possible reason that lead to inconsistencies of the findings were usage likely to be the usage of different measures or age of respondents (Goldbeck et al., 2007). It was also mentioned by the researchers that age and life satisfaction has no relationship if the respondents were in post puberty age.

In addition, t-test analysis indicated that overall, family, and living environment life satisfaction were significantly different between adolescents from intact family and those from non-intact family. Based on past literature of a comparative study which was conducted in 36 western countries on more than 180 thousand respondents aged 11 to 15 years old, it concluded that family structure indeed impacted life satisfaction (Bjarnason et al., 2012). Consistent with the current study, respondents who were living with intact family reported to have higher life satisfaction than those who were living with other types of family arrangements, such as single parent family and step family. Adolescents living with father only and those with no parents, or single parent with other adults had very much higher risk of life dissatisfaction (Kwan, 2008; Zullig, Valois, Huebner, & Drane, 2005). A dysfunctional family is more likely to have their children having low life satisfaction (Shek, 2005). Family disruption is a very complicated occurrence that causes stress throughout many different contexts in children's lives (Chappel, 2011).

In conclusion, the demographic variables such as age, gender and family structure impacted life satisfaction of adolescents. These findings of the present study serve as potential input to initiate appropriate programs for different age groups, gender, and family structure to enhance adolescents' life satisfaction. It is crucial to understand that every adolescent is unique and their cognitive judgment of life satisfaction can be differed by their biological age, gender, and family structure. One of the limitations of the study included was the result cannot be inferred to the whole population of adolescent in Malaysia as the findings were based on one state in Malaysia only. It is suggested that future study include respondents from other areas of the country to have a clearer perspective of adolescents' life satisfaction.

References

- Bjarnason, T., Bendtsen, P., Arnarsson, A. M., Borup, I., Iannotti, R. J., Lofstedt, P., et al. (2012). Life satisfaction among children in different family structures: A comparative study of 36 Western societies. *Children & Society, 26*, 51-62. <http://dx.doi.org/10.1111/j.1099-0860.2010.00324.x>
- Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks, CA: Sage Publications.
- Chappel, A. (2001). *Associations between adolescents' family stressors, life satisfaction and substance use*. Degree thesis, University of South Florida. Retrieved from <http://scholarcommons.usf.edu/etd/3039>
- Department of Social Welfare. (2012). *Number of uncontrolled children's cases in states of Malaysia 2011*. Retrieved from <http://www.jkm.gov.my>
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125*, 276-302. <http://dx.doi.org/10.1037/0033-2909.125.2.276>
- EMIS. (2011). *Perangkaan Pendidikan Malaysia*. Retrieved from <http://emisonline.moe.gov.my>
- Gilman, R., & Huebner, E. S. (2006). Characteristics of adolescents who report very high life satisfaction. *Journal of Youth and Adolescence, 35*, 311-319. <http://dx.doi.org/10.1007/s10964-006-9036-7>
- Goldbeck, L., Schmitz, T. G., Besier, T., Herschbach, P., & Henrich, G. (2007). Life satisfaction decreases during adolescence. *Quality Of Life Research: An International Journal of Quality Of Life Aspects of Treatment*,

- Care and Rehabilitation*, 16, 969-979. <http://dx.doi.org/10.1007/s11136-007-9205-5>
- Haranin, E., Huebner, E. S., & Suldo, S. M. (2007). Predictive and incremental validity of global and domain-based adolescent life satisfaction reports. *Journal of Psychoeducational Assessment*, 25, 127-138. <http://dx.doi.org/10.1177/0734282906295620>
- Huebner, E. S. (1994). Preliminary development and validation of a multidimensional life satisfaction scale. *Psychological Assessment*, 6, 149-58.
- Huebner, E. S., Suldo, S. M., Valois, R. F., Drane, J. W., & Zullig, K. J. (2004). Brief Multidimensional Students' Life Satisfaction Scale: Sex, race, and grade effects in a high school sample. *Psychological Reports*, 94, 351-356. <http://dx.doi.org/10.2466/pr0.94.1.351-356>
- Huebner, E. S. (2001). *Manual for the Multidimensional Students' Life Satisfaction*. University of South Carolina Department of Psychology Columbia. Retrieved from https://ww2.cas.sc.edu/psyc/sites/default/files/directory_files/huebslssmanual_0.pdf
- Huebner, E. S., Funk, B. A., & Gilman, R. (2000). Cross-sectional and longitudinal psychosocial correlates of adolescent life satisfaction reports. *Canadian Journal of School Psychology*, 16, 53-64. <http://dx.doi.org/10.1177/082957350001600104>
- Hultell, D., & Gustavsson, J. P. (2008). A psychometric evaluation of the Satisfaction with Life Scale in a Swedish nationwide sample of university students. *Personality and Individual Differences*, 44, 1070-1079. <http://dx.doi.org/10.1016/j.paid.2007.10.030>
- Kimberling, R., & Ouimette, P. (Eds.). (2002). *Gender and PTSD*. New York: Guilford.
- Kwan, Y. K. (2008). Life satisfaction and family structure among adolescents in Hong Kong. *Social Indicators Research*, 86(1), 59-67. <http://dx.doi.org/10.1007/s11205-007-9092-8>
- Levin, K., Dallago, L., & Currie, C. (2012). The association between adolescent life satisfaction, family structure, family affluence and gender differences in parent-child communication. *Social Indicators Research*, 106(2), 287-305. <http://dx.doi.org/10.1007/s11205-011-9804-y>
- Park, H. S., Koo, H. Y., & Schepp, K. G. (2005). Predictors of suicidal ideation for adolescents by gender. *Taehan Kanho Hakhoe Chi*, 35(8), 1433-1442.
- Park, N. (2005). Life satisfaction among Korean children and youth: A developmental perspective. *School Psychology International Journal*, 26, 209-223. <http://dx.doi.org/10.1177/014303439112301>
- Park, N., & Huebner, E. S. (2005). A cross-cultural study of the levels and correlates of life satisfaction among adolescents. *Journal of Cross-Cultural Psychology*, 36, 444-456. <http://dx.doi.org/10.1177/0022022105275961>
- Piko, B. F., & Hamvai, C. (2010). Parent, school and peer-related correlates of adolescents' life satisfaction. *Children and Youth Services Review*, 32(10), 1479-1482. <http://dx.doi.org/10.1016/j.childyouth.2010.07.007>
- Raboteg-Saric, Z., Brajsa-Žganec, A., & Šakic, M. (2008). Life satisfaction in adolescents: The effects of perceived family economic status, self-esteem and quality of family and peer relationships. *Primljeno*, 3(4), 547-564.
- Salmela-Aro, K., & Tynkkynen, L. (2009). Trajectories of life satisfaction across the transition to post-compulsory education: Do adolescents follow different pathways? *Journal of Youth and Adolescence*, 39(8), 870-881. <http://dx.doi.org/10.1007/s10964-009-9464-2>
- Sawatzky, R., Ratner, P. A., Johnson, J. L., Kopec, J. A., & Zumbo, B. D. (2009). Sample heterogeneity and the measurement structure of the multidimensional students' life satisfaction scale. *Social Indicator Research*, 94, 273-296.
- Shek, D. T. L. (2005). Perceived parental control processes, parent-child relational qualities, and psychological well-being in Chinese adolescents with and without economic disadvantage. *Journal of Genetic Psychology*, 166, 171-188. <http://dx.doi.org/10.3200/GNTP.166.2.171-188>
- Siti Nor, Y., Tan, S. A., Tan, J. P., & Rumaya, J. (2012). Malaysian adolescents' life satisfaction. *Archives Des Sciences*, 65(8), 182-192.
- Suldo, S. M., & Huebner, E. S. (2006). Is extremely high life satisfaction during adolescence advantageous? *Social Indicators Research*, 78, 179-203. <http://dx.doi.org/10.1007/s11205-005-8208-2>
- Sun, R. C. F., & Shek, D. T. L. (2010). Life satisfaction, positive youth development, and problem behaviour

- among Chinese adolescents in Hong Kong. *Social Indicators Research*, 95, 455-474. <http://dx.doi.org/10.1007/s11205-009-9531-9>
- Tumkaya, S., Aybek, B., & Celik, M. (2008). An investigation of students' life satisfaction and loneliness level in a sample of Turkish students. *International Journal of Human Sciences*, 5(1), 1-15.
- Valois, R. F., Zullig, K. J., Huebner, E. S., & Drane, J. W. (2004). Life satisfaction and suicide among high school adolescents. *Social Indicators Research*, 66, 81-105. <http://dx.doi.org/10.1023/B:SOCI.0000007499>
- Zullig, K. J., Valois, R. F., Huebner, E. S., & Drane, J. W. (2005). Adolescent health related quality of life and perceived satisfaction with life. *Quality of Life Research: An International Journal of Life Aspects of Treatment, Care and Rehabilitation*, 14, 1573-1584. <http://dx.doi.org/10.1007/s11136-004-7707-y>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).