### Conceptual Principles of Quality of Life: An Empirical Exploration

P Bramston (1), H Chipuer (2), G Pretty (1)

(1)University of Southern Queensland (2)Griffith University

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Contact:

Dr Paul Bramston

Psychology Department

University of Southern Queensland, Toowoomba

Australia, 4350

Email: bramston@usq.edu.au

# **Structured Summary**

Background: Quality of life is a popular measure of outcomes and its widespread use has led to recent calls for a better understanding of the construct, emphasising the need to build a substantial body of knowledge around what determines perceptions of life quality. Some conceptual principles are examined in this study.

Method: Self-ratings of life quality and three likely determinants at an individual level (stress), an interactional level (social support) and a community level (neighbourhood belonging) were used. Two groups of young adults from an urban community participated, one identified as having an intellectual disability.

Results: Young adults with intellectual disability rated their satisfaction with health significantly higher and intimacy and community involvement lower than the comparison group. Social support emerged as the strongest predictor of life satisfaction across both groups.

Conclusion: The conceptual principles of subjective quality of life provide a useful framework to discuss findings and to stimulate further research.

### Introduction

Much of what we know of quality of life has recently been consolidated into principles developed by a Special Interest Research Group of the International Association for the Scientific Study of Intellectual Disabilities (IASSID) (Schalock et al., 2002). This study focuses on the conceptualisation principles stating that quality of life is multidimensional and influenced by personal and environmental factors and their interactions, has the same components for all people, and is enhanced by selfdetermination, resources, purpose in life and a sense of belonging. This conceptual framework guides the current study into personal, social and community determinants of subjective quality of life.

### Method

## **Participants**

Participants consisted of 80 young adults identified with an intellectually disability, with an average age of 20.8 years, range 17-25, and 120 young adults drawn from the community with a mean age of 19.5 years, range 16-23. Males and females were about evenly distributed in each sample. Over two thirds of participants in both samples lived with their families, the remainder with friends and a small percentage on their own.

The participants with disability were all working in an Australian supported employment agency that called for volunteers after briefly describing the research, while the community sample comprised members of the public who happened to be in a shopping mall in the centre of a large Australian city. All participants were volunteers and possessed verbal and comprehension skills. Those with an intellectual disability functioned in the mild to moderate range according to agency

documentation. Participants over 18 years signed their own consent forms, while parents/guardians gave written consent for the younger participants.

#### <u>Materials</u>

Quality of life was measured with the Comprehensive Quality of Life Scale (ComQol) which is designed for use amongst the general population with a parallel form for people with intellectual disability (ComQol-ID) (Cummins, 1992). Both versions assess subjective quality of life within seven life domains. Responses are scored on a 5-point Likert scale for both the importance and satisfaction dimensions. Both ComQol and ComQol-ID have been shown to be internally consistent (see Cummins, McCabe, Romeo, and Gullone, 1994). Content validity has been similarly been reported as being acceptable (McVilly, Burton-Smith, & Davidson, 2004).

Stress in both samples was assessed with the Lifestress Inventory, a self-report scale specifically developed for use by people with intellectual disability by Bramston, Fogarty and Cummins (1999). It comprises 30 life events that typically stress people. The inventory has been shown to be reasonably reliable, valid and factorially stable (Fogarty, Bramston & Cummins, 1997) and clinically useful in understanding reaction to the pressures experienced by young adults with intellectual disability moving into community accommodation (Bramston & Cummins, 1998). The scale has previously been found to be reliable and factorially interpretable amongst people without a disability (Bramston et al., 1999). The measure consists of three subscales assessing stress related to worry, interpersonal relationships, and coping. In the current study, internal reliabilities ranged from .65 to .61 for the group with disability and from .86 to .74 for the comparison group.

Frequencies of each of the subscales indicated that over 82% of both groups reported no stress with regard to worry and coping so these two subscales were

dropped from the analyses. Scores on the interpersonal relationships subscale were used in subsequent analyses.

Sense of community was assessed in both groups using the Neighbourhood Youth Inventory (NYI; Chipuer et al., 1999). This questionnaire was developed specifically to assess adolescents' sense of community in their neighbourhood. Items are responded to on a five point scale, with 1 being "not at all true" and 5 being "completely true". The NYI contains four subscales, "Activity", "Friends", "Safety", and "Support". The factor structure, reliability and construct validity have been demonstrated with groups of Australian adolescents without intellectual disability (Chipuer et al., 1999). The scale was successfully used in a group of rural adolescents with intellectual disability by Pretty, Rapley and Bramston (2002). In this study, the internal reliabilities were below .50 for the "Activity" and "Friends" subscales in the group with disability so these two subscales were dropped from all further analyses. Internal reliability in the group with disability was .82 for support and .71 for safety, while for the comparison group was .91 for support and .84 for safety.

Social support was measured in both groups using the Social Support Scale (SPS; Cutrona & Russell, 1987). The SPS consists of 24 items assessing six aspects of social support via relationships with friends and co-workers. The scale was chosen because the item wording is relatively simple. Administration of the scale in a 1:1 setting amongst the group with intellectual disability allowed the administrator to ensure respondents understood each item. Internal reliability was .72 for the group with disability and .91 for the comparison group.

#### Procedures

The data collection for the young adults with an intellectual disability who volunteered occurred in a private, comfortable room at their workplace. In a 1:1

meeting, participants were read each question aloud and responded verbally by choosing a Likert scale option or by pointing to a visual aid depicting pictures of buckets containing various amounts of liquid (none, a little, a fair bit and a lot). The administrator was an experienced, registered psychologist who explained items or words to participants who looked unsure of their meaning. The young adults without disability were recruited by the researcher from amongst the shoppers in a busy public mall. Volunteers from those passing by stopped at a small table, received a description of the study, signed a consent form, individually filled in the questionnaire and took some lollies as a small token of appreciation. Administration of the ComQol-ID, Lifestress, NYI and SPS generally took between 20 and 45 minutes for all participants.

### Results

Principle 1 states that quality of life is multidimensional and in this study is operationalised by importance and satisfaction ratings across seven life domains. As can be seen in Table 1, the mean responses are all well above the scale mid-point suggesting that on average these participants report being well satisfied with life as one would anticipate from the research literature (Cummins, 1995).

### <Table 1 about here>

<u>Principle 2</u> states that quality of life has the same components for all people. It includes events and experiences common to all humans and those unique to individuals. There was a significant difference between the groups in overall importance, Wilks' Lambda = .77, F (7, 191) = 8.16, p < .001, eta<sup>2</sup> = .23 and satisfaction, Wilks' Lambda = .87, F (7, 190) = 3.92, p < .001, eta<sup>2</sup> = .13. Follow-up ANOVAs controlling for Type I error with alpha set at .01 revealed three of the quality of life satisfaction indices were significantly different. As shown in Table 1,

people with intellectual disability reported significantly higher satisfaction with their health, while they reported significantly lower satisfaction with intimacy and community involvement. Overall, people with intellectual disability reported each of the quality of life domains as less important than the comparison group, with the exception of material wellbeing where there was no difference.

Principle 3 notes that quality of life is enhanced by self-determination, resources, purpose in life and a sense of belonging. To examine the influence of such personal and environmental factors on satisfaction with life, analyses were conducted regressing the satisfaction on each of the quality life domains onto measures of stress, social support, and neighbourhood belonging. Analyses were conducted separately for the two groups (see Table 2).

#### <Table 2 about here>

Four of the seven analyses were significant for both groups suggesting this combination of variables is partially successful in predicting satisfaction ratings; however only two of these consisted of the same pattern of findings. The domains of safety and emotional well-being were both significantly predicted by social support for both groups. For the people with intellectual disability, social support was also a significant predictor of satisfaction of material wellbeing, while there was a trend toward significance for the comparison group. Similarly, social support and stress in interpersonal relationships both showed trends for prediction of satisfaction with health for both groups. The domains of intimacy and community involvement were significantly predicted by social support and stress in interpersonal relationships for the comparison group, but were not for the people with intellectual disability.

### **Discussion**

Findings of this study support the utility of the conceptual principles of quality of life as a framework and stimulus for research. Results demonstrate the advantage of a multidimensional quality of life measure (principle 1), the value of comparisons across groups with and without intellectual disability (principle 2), and importance of social rather than individual or community level variables as quality of life predictors (principle 3). The fourth conceptual principle deals with the advantages of measuring both subjective and objective quality of life which was not possible in the current study.

Central to quality of life research is the degree to which it is a function of environmental circumstances and/or oneself (Rapley, 2003). The bottom-up model refers to an evaluative summary of the environmental circumstances of one's life and this study offers some evidence for the environmental impact of support from friends and family in perceptions of emotional well-being. According to Cummins and Lau (2004) close relationships are extensively rated as highly important and often lead to the greatest sense of satisfaction. Similarly, Duvdevaney and Arar's (2004) research indicated that friendship activity was closely associated with subjective quality of life for people with intellectual disabilities. Friendships form the "heartland of life quality for most people" (Cummins & Lau, 2004, p. 200).

In recognition of the challenges associated with obtaining reliable and valid answers from respondents, several studies (e.g., Antaki & Rapley, 1996) have investigated a range of response bias issues with the intention of providing methods of best practice for researchers in this field. Strategies employed to reduce response bias effects in this study were adaptations from Finlay and Lyons (2001) and include use of 1:1 interview when administering the battery to young adults with intellectual disability, explicitly stating that information will not be shared with others, use of

significant events as markers, checking the understanding of words and concepts and the optional use of visual aids to assist in the understanding of Likert scale response formats. The variation in data collection procedures between the two groups in this study was a potential limitation and the collection of objective quality of life data would have significantly enhanced the current study and is recommended to future researchers.

In conclusion, the value of the quality of life concept is that it can be a unifying, umbrella concept that offers a common framework, in this case for members of an Australian community with and without an intellectual disability. The framing of underlying principles within quality of life offers a discourse that provides a range of important concepts and dimensions for researchers and practitioners.

### References

- Antaki, C. & Rapley, M. (1996). Questions and answers to psychological measurement: Hidden troubles in 'quality of life' interviews. *Journal of International Disabilities Research*, 40, 421-437.
- Bramston, P., & Cummins, R.A. (1998). Stress and the move into community accommodation. *Journal of Intellectual and Developmental Disability*, 23, 295-308
- Bramston, P., Fogarty, G., & Cummins, R. A. (1999). The nature of stressors reported by people with intellectual disability. *Journal of Applied Research in Intellectual Disabilities*, 12(1), 1-10.
- Chipuer, H.M., Pretty, G.H., Delorey, E., Miller, M., Powers, T., Rumstein, O., Barnes, A., Cordasic, N., & Laurent, L. (1999). The neighbourhood youth inventory: Development and validation. *Journal of Community and Applied Social Psychology*, *9*, 355-368.
- Cummins, R. A. (1992). *Comprehensive quality of life scale intellectual disability* (3<sup>rd</sup> ed.). Melbourne, Victoria: Psychology Research Centre, Deakin University.
- Cummins, R. A. (1995). On the trail of the gold standard for subjective well-being. Social Indicators Research, 35, 179-200.
- Cummins, R. A., & Lau, A. L. D. (2004). Cluster housing and freedom of choice: a response to Emerson (2004). *Journal of Intellectual & Developmental Disability*, 29(3), 198-201.
- Cummins, R. A., McCabe, M., Romeo, Y., & Gullone, E. (1994). The comprehensive quality of life scale: Instrument development and psychometric evaluation on

- college staff and students. *Educational and Psychological Measurement, 54*, 372-382.
- Cutrona, C. E., & Russell, D. W. (1987). The provisions of social relationships and adaptation to stress. *Advances in Personal Relationships*, 1, 37-67.
- Duvdevany, I., & Arar, E. (in press). Leisure activities, friendships, and quality of life of persons with intellectual disability: Foster homes vs. community residential settings. *International Journal of Rehabilitation Research*.
- Finlay, W. M. L., & Lyons, E. (2001). Methodological issues in interviewing and using self-report questionnaires with people with mental retardation.

  \*Psychological Assessment, 13(3), 319-335.
- Fogarty, G. J., Bramston, P., & Cummins, R. A. (1997). Validation of the Lifestress Inventory. *Research in Developmental Disabilities*, 18, 435-456.
- McVilly, K. R., Burton-Smith, R. M., & Davidson, J. A. (2000). Concurrence between subject and proxy ratings of quality of life for people with and without intellectual disabilities. *Journal of Intellectual & Developmental Disability*, 25(1), 19-39.
- Rapley, M. (2003). *Quality of life research: A critical introduction*. London, UK: Sage.
- Pretty, G., Rapley, M., & Bramston, P. (2002). Neighbourhood and community experience, and the quality of life of rural adolescents with and without an intellectual disability. *Journal of Intellectual and Developmental Disability*, 27(2), 106-116.
- Schalock, R.L., Brown, I., Brown, R., Cummins, R.A., Felce, D., Mattika, L., Keith, K.D., & Parmenter, T. (2002). The conceptualisation, measurement, and

application of quality of life for persons with intellectual disabilities. Mental Retardation, 40(6), 457-470

	Sat	tisfaction	Importance	<u>e</u>
	<u>Pwid</u>	Comparison	Pwid Con	<u>mparison</u>
	Mean (SD)	Mean (SD)	Mean (SD) N	Mean (SD)
Material Wellbeing	3.94 (.85)	4.00 (.75)	3.78 (.73)	3.72 (.92)
Health	4.01 (.76) <sup>a</sup>	3.71 (.76) <sup>b</sup>	3.81 (.66) <sup>a</sup>	4.11 (.77) <sup>b</sup>
Productivity	3.85 (.83)	3.83 (.65)	3.44 (.94) <sup>a</sup>	3.82 (.78) <sup>b</sup>
Intimacy	3.89 (.75) <sup>a</sup>	4.22 (.77) <sup>b</sup>	3.89 (.55) <sup>a</sup>	4.41 (.71) <sup>b</sup>
Safety	3.96 (.82)	4.01 (.68)	3.47 (.97) <sup>a</sup>	4.08 (.34) <sup>b</sup>
Community	3.65 (.92) <sup>a</sup>	3.95 (.75) <sup>b</sup>	3.11 (1.22) <sup>a</sup>	3.62 (.86) <sup>b</sup>
Emotional Wellbeing 4.00 (.75)		3.96 (.70)	3.77 (.66) <sup>a</sup>	4.30 (.78) <sup>b</sup>

<sup>&</sup>lt;sup>1</sup>Range of scores for satisfaction and importance is 1 to 5.

Comparisons are made within the satisfaction and within the importance columns.

Pwid = People with intellectual disability

<sup>&</sup>lt;sup>a</sup>Means with different superscripts differ from one another at the  $\underline{p}$  < .007 level.

Table 2.

<u>Summary of Linear Regression Analysis for Variables Predicting ComQol for people</u>

<u>with disability ( N=79) and the comparison group (N=119)</u>

People	People with intellectual disability				Con			
Variable	$\mathbb{R}^2$	В	SE B	В	$R^2$	В	SE B	В
Material Wellbeing .12**					.07*			
Interpersonal Stress		05	.22	03		.01	.15	.01
Social Support		.04	.02	.31***		.02	.01	.20**
Neighbourhood Suppor	rt	.01	.02	.03		.01	.01	.13
Neighbourhood Safety		03	.02	14		.01	.01	.06
<u>Health</u>	.12*	*			.07*			
Interpersonal Stress		36	.19	22*		.30	.16	.18*
Social Support		.02	.01	.19		.01	.01	.17
Neighbourhood Suppor	rt	.01	.02	.05		.01	.01	.12
Neighbourhood Safety		.01	.02	.08		.01	.01	.08
Productivity .09				.06				
Interpersonal Stress		.34	.22	.18		.01	.13	.01
Social Support		.03	.01	.21*		.01	.01	.14
Neighbourhood Suppor	rt	.01	.02	01		.02	.01	.19**
Neighbourhood Safety		.04	.02	.21		.01	.01	03

<sup>\*</sup>p<.06; \*\*p<.05; \*\*\*p<.01

Table 2, cont'd

People	People with intellectual disability			Cor	1		
Variable	$\mathbb{R}^2$	В	SE B	В	$R^2$ B	SE B	В
Intimacy .	07				.23***		
Interpersonal Stress		.20	.20	.12	.32	.14	.19**
Social Support		.02	.01	.15	.03	.01	.45***
Neighbourhood Suppor	t	.00	.02	.00	01	.01	09
Neighbourhood Safety		.04	.02	.22*	.01	.01	.10
<u>Safety</u> .	12**	<del></del>			.12***		
Interpersonal Stress		22	.21	12	03	.14	02
Social Support		.04	.02	.29***	.02	.01	.29***
Neighbourhood Suppor	t	02	.02	10	.00	.01	01
Neighbourhood Safety		.00	.02	.01	.01	.01	.13
<u>Community</u> .05 .10**							
Interpersonal Stress		14	.24	07	31	.15	19**
Social Support		01	.02	10	.01	.01	.25***
Neighbourhood Suppor	t	.02	.02	.12	.01	.01	06
Neighbourhood Safety		.02	.03	.11	01	.01	07

<sup>\*</sup>p<.06; \*\*p<.05; \*\*\*p<.01

People	with i	vith intellectual disability				Comparison			
	$\mathbb{R}^2$	В	SE B	В	$\mathbb{R}^2$	В	SE B	В	
Emotional Wellbeing .12** .12***									
Interpersonal Stress	•	13	.19	.08	-	.23	.14	14	
Social Support		03	.01	.31***		.02	.01	.25***	
Neighbourhood Suppor	t.	03	.02	.19		.01	.01	.07	
Neighbourhood Safety		01	.02	06		.01	.01	.04	

<sup>\*</sup>p<.06; \*\*p<.05; \*\*\*p<.01