
A Snapshot of Five Materialism Studies in Australia

Shaun A. Saunders

University of the Sunshine Coast, Australia

Our consumer-driven society is dependent upon economic growth and people's belief that acquiring possessions will make them happier. However, the present results suggest that materialistic values and behaviours might not be associated with psychological health or individual life satisfaction in Australia. This might be attributed in part to materialism being based largely on the process of social comparison. Furthermore, materialistic values and behaviours also do not appear to be congruent with either a love of life itself — *biophilia* — or environmental concerns. If materialistic persons are indeed more dependent on comparisons with others, then it might be reasonably hypothesised that they would also score lower on self-esteem, and this should be a direction for future research.

The 20th century is arguably most notable for the global rise of consumerism and the widespread growth of a market-driven economy (Saunders, 2001). While in recent decades there has been a growing concern about the effects that such economic growth may be having on the environment, far less attention has been paid to the psychological dimensions associated with consumer-driven behaviour, particularly in Australia. Materialism can be defined as an excessive concern for material possessions (Richins & Dawson, 1992) that, according to critics, is likely to be associated with dissatisfaction in general (e.g., Cushman, 1990; Harmon, 1996) and more specifically, a reduction in psychological wellbeing (e.g., Fromm, 1955). Despite this, materialism has often been referred to as a predominant American value (Funkhouser, 1989) and also an Australian one (Hawkins, Neal, Quester, & Best, 1994). Some support for this has been reported by Saunders (2000) who found similar overall response characteristics from Australian respondents when using the same measure of materialism employed by Richins and Dawson (1992) in their studies employing North-American sampling frames.

With these considerations in mind, the present article aims to provide a brief overview of materialism research carried out thus far by the author assessing key psychological dimensions associated with these values and attitudes within an Australian sampling frame, and also offer suggestions for future research based on these findings.

Fromm (1947) proposed that in a market-driven, consumeristic society, the self is experienced as a commodity whose value and meaning is externally

determined and, from this, that materialistic values and attitudes would also be associated with conformist tendencies. This is addressed in the first study, where it was hypothesised that a measure of conformity would be positively correlated with materialism.

According to Spielberger, Ritterband, Sydeman, Reheiser and Unger (1995), emotions 'have a significant impact on health and personal effectiveness' and that 'the emotional vital signs which are most critical to an individual's wellbeing are anxiety, anger and depression' (p. 52). Therefore, to better assess the question of the possible relationship between material values and attitudes and individual psychological wellbeing, measures of depression, anger and anxiety were employed in the second study. Furthermore, in view of Fromm's (1955, 1976) social criticisms and Richins and Dawson's (1992) findings that materialism was negatively correlated with all aspects of life satisfaction measured in a North-American sample, in the fourth study it was hypothesised that overall satisfaction with life would be negatively correlated with materialism.

In a North-American sampling frame, Richins and Dawson (1992) found that education was not correlated with scores on materialism, and Saunders and Allen (2000) found this to be also the case in an Australian study. However, given that commercial television is, with little doubt, one of the most salient sources of information for educating people in marketing values associated with contemporary consumeristic western society, one would expect that any instrument designed to measure materialistic values and attitudes should differentiate between those who watch relatively little television and

Address for correspondence: Shaun A. Saunders, PO Box 382, The Junction NSW.2291, Australia. E-mail: sasaunders@bigpond.com

those who watch more. Hence, participants in the second study were also asked to indicate how much time they spent, on average, viewing commercial television each day.

The global spread of consumerism has been associated with a dramatic shift in values both within and across cultures (Hofstede, 1980). With this in mind, the third study aimed to assess the relationship between materialism and Rokeach's (1973) terminal values, which can be defined as an individual's belief that specific life goals are personally or socially preferable. Considering that conspicuous material possessions and associated patterns of consumption may be particularly important criteria of social comparison when determining relative status, it is hypothesised that scores on materialism would be positively correlated with the Rokeach value 'equality'. That is, as scores on materialism increase, it is hypothesised that individuals will rank equality as less important to them. This is because such individuals are presumably only concerned with whether or not they are better or worse off than others after making comparisons in the consumer domain. The relationship between materialism and scores on a measure of biophilia (i.e., love of life and living things) and attitudes towards the environment in Australia are also addressed in this study. Fromm (1955) believed that materialistic values and attitudes were the antithesis of biophilia, and hence it was hypothesised that scores on materialism would be negatively correlated with both of these measures.

Finally, it was further hypothesised that, due to its very nature, scores on materialism should be negatively and significantly correlated with values consistent with voluntary simplicity, and this is addressed in study no. 5.

Method

Participants

The respondents in these studies were four samples of undergraduate students:

Study 1. $n = 84$ (31 males and 53 females, mean age 25.9 yrs, range: 18–60 yrs)

Study 2. $n = 302$ (76 male and 226 female, mean age 23 yrs, range 17–56 yrs)

Study 3. $n = 101$ (22 males and 79 females, mean age 25.9 yrs, range 18–55 yrs)

Study 5. $n = 87$ (33 males and 54 females, mean age 27.7 yrs, range: 17–60 yrs)

and, randomly selected from a regional telephone directory:

Study 4. $n = 193$ persons (112 males and 81 females, mean age 48.8 yrs, range 18–91 yrs, 50% in paid employment — 47.5% professional and white collar, 2.5% blue-collar, 25% retired, 12% homemakers, 9% students and 4% unemployed).

All respondents were from Newcastle, New South Wales (which is one of two commonly preferred test markets for consumer goods in Australia).

Instruments

Materialism (Richins & Dawson, 1992). Comprises 18 items, using a 5-point Likert scale response format. Cronbach's coefficient alpha has been found to range between .80 and .88 for the entire scale. Test–retest reliability is quoted as $r = .87$.

Anger Expression (AX; Spielberger et al., 1985). Constructed to assess how people generally feel or react when they feel angry. Comprised of 24 items, each measured on a 4-point Likert scale ranging from *almost never* to *almost always*. Cronbach's coefficient alphas have been reported to range between .73 to .84 (Spielberger, Ritterband, Sydeman, Reheiser, & Unger, 1995).

Beck Anxiety Index (Beck, Epstein, Brown, & Steer, 1988). Measures the severity of subjective anxiety and consists of 21 descriptive statements of anxiety symptoms presented in a 4-point scale format ranging from *not at all* to *severely, I could barely stand it*. Internal reliabilities (Cronbach's coefficient alpha) of between .92 to .94 have been reported (Beck & Steer, 1990), and one-week test–retest reliability has been reported at .75 (Beck, Rush, Shaw, & Emery, 1979, cited in Beck & Steer, 1990).

Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Consists of 21 items, each consisting of four self-evaluative statements. Past studies have reported a coefficient alpha as high as .91 (Zauszniewski, 1995), while the construct validity has been assured through comparisons with other rating scale of depression (Beck, Steer, & Garbin, 1988).

Life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985). Designed to measure global life satisfaction across all age groups and does not tap related constructs such as positive affect or loneliness (Diener et al. 1985). This scale is reported to have a 2-month test–retest correlation coefficient of .82, and a coefficient alpha of .87 (Diener et al., 1985). The Satisfaction With Life Scale (SWLS) consists of five statements, to which participants may agree or disagree with by indicating their response on a 7-point Likert scale. Further, scores on the SWLS were found to correlate moderately to highly with other measures of subjective wellbeing (Diener et al., 1985).

Attitude to Life (Biophilia) Scale (Maccoby, 1972; Ray, 1984). Originally designed by Maccoby (1972) to measure Fromm's (1955) concept of Biophilia (i.e., love of life), and later modified for contemporary use in Australia by Ray (1984). This scale consists of 22 items; 19 requiring a response of *Yes*, *No*, or *?*, and three requiring a choice of four available alternatives. The internal reliability has been reported at $\alpha = .77$ (Ray, 1984).

Social Conformity (Comrey, 1987). Individuals with high scores 'accept society as it is, resent nonconformity

in others, seek the approval of society, and respect the law'. Split-half reliability is reported to be a very high .94 (.88 reported for a sample of 669 Australian subjects). Further, the validity of the subscale has been affirmed in a number of studies (see Comrey, 1988, for a full listing). The Comrey inventory has 20 items and uses dual 7-point rating scales, ranging from *always* to *never* (scale X), and *definitely not* to *definitely* (scale Y).

Environmentalism (Ray, 1975). designed to measure attitudes towards environmentalism in Australia, and comprises 20 items, using a 5-point Likert scale response format. Ten of the items are reverse scored (randomly). Cronbach's coefficient alpha has been reported at .85 for the entire scale (test-retest reliability was not reported).

Voluntary simplicity (Shama & Wisenblit, 1984): entails moral and ecological responsibility, low consumption of goods and self-sufficiency and self-actualisation. This construct was assessed in the present studies by using a questionnaire based on a revised version of those values listed by Shama and Wisenblit (1984) as typical of voluntary simplifiers. The items are 'I believe in material simplicity, i.e., buying and consuming only what I need'; 'I believe in "small is beautiful", e.g., safety issues aside, I prefer smaller cars over large cars'; 'I believe that product function is usually more important than its style'; 'I am interested in personal growth more than economic success'; 'I am determined to have more control over my life as a consumer, e.g., refrain from buying on credit'; and 'I consider myself ecologically responsible'. Participants may agree or disagree with these items by indicating their response on a 7-point Likert scale.

Rokeach Value Survey (Rokeach, 1973). The 18 terminal values (scored as rankings) are designed to measure the goals that a person would like to achieve during their lifetime.

Procedure

All participants completed their questionnaire booklets voluntarily in their own time. (For information on which samples the measures were distributed to, please refer to Table 1.)

Results

The results were calculated using Minitab V11, and correlations between materialism and each of the scales can be seen in Table 1. Note, though, that in accordance with the conservative criteria suggested by Williams and Page (1989) for rejecting null hypotheses, correlations of less than $r = .20$ will not be evaluated as significant regardless of the possible effect of sample size.

In Table 1 it can be seen that gender has no effect on materialism scores, and of the other variables under consideration, it is only significantly correlated with biophilia. Age is correlated with materialism in the smaller samples, but not the largest sample of 302

participants. Age is also significantly correlated with voluntary simplicity, and several Rokeach values, although only one of the latter is also significantly correlated with materialism — world at peace.

Discussion

While the possession of conspicuous goods may be equated with success and happiness and seen as a goal in itself (Richins & Dawson, 1992), in the present studies this desire was associated with neither individual life satisfaction nor psychological health as measured by scores on Depression and Anger Expression (see Spielberger, Ritterband, Sydeman, Reheiser, & Unger, 1995); note that the correlation between materialism and anxiety fell short of the conservative criteria adopted in this research for rejecting null hypotheses. In a volatile and constantly fluctuating market-driven society, where individual worth may be valued according to the acquisition of possessions, someone else will always have more possessions, and the possessions which one does own are unlikely to hold value for long. This, in turn, might lead to frustration, which is a precursor to anger expression (Dollard, Doob, Miller, Mowrer, & Sears, 1939).

For those individuals whose sense of worth and prestige in a market-driven society does indeed depend largely upon the conspicuous possessions they own, then that same volatility in the market place in western society might induce feelings of helplessness and hopelessness — which underlie depression — in those persons as they continually strive to maintain status in the face of changing market trends (Saunders & Munro, 2000). Anecdotal support for this is provided by Seligman (1990), according to whom the lifetime prevalence of depression among North Americans in the late 20th century was roughly 10 times greater than it was at the time of World War II (i.e., just prior to the postwar increase in mass production and consumption and the emergence of Fromm's 1955 'marketing character'). Such a state of affairs led Klerman (1979) to describe this period in western history as 'the age of melancholy'. However, among traditional (i.e., non-consumerist) societies such as the Kaluli tribe of New Guinea, depression as westerners define it does not appear to exist at all (Scheffelin, 1984; Schumaker, 1996), while among the Old Amish order of Lancaster County, Pennsylvania, depression has been reported at a prevalence of roughly one-fifth to one-tenth of that in, say, Baltimore (Egeland & Hostetter, 1983).

The positive correlation between materialism and conformity is supportive of Fromm's (1947) notion that the self in marketing society is experienced as a commodity whose value and meaning is externally determined: 'I am as you desire me to be' (p. 73). Arguably, though, although conformity may indeed be prevalent in western society as Fromm proposed, it would be necessary to some degree at least in any, ordered, structured society (Callan, Gallois, Noller,

Table 1

Correlations Between Materialism and Conformity, Anger Expression, Depression, Commercial TV Viewing, Biophilia, Environmentalism, Environmentalism, and Rokeach Values

Study No. (n)	Variable	Materialism	Age	Gender#	Cronbach's alpha
Study 1 (n = 84)	Conformity	.30**	-.01	.07	.75
	Materialism	1.00	-.23*	0.00	.82
Study 2 (n = 302)	Anger expression	.33***	-.13	.00	.74
	Depression	.21***	-.05	.06	.87
	Anxiety	.19**	-.17	.15	.88
	Com TV viewing	.25***	-.18	-0.11	NA
	Materialism	1.00	-.19	.13	.85
Sample 3 (n = 101)	Biophilia	-.38***	-.10	.48***	.68
	Environmentalism	-.37***	.15	.11	.81
	Rokeach (terminal) values^				NA
	Comfortable life	-.37***	.00	.16	
	Exciting life	-.14	.13	-.07	
	Sense of accomplishment	-.05	-.19	.18	
	World at peace	.21*	.21*	.10	
	World of beauty	.23*	.00	.03	
	Equality	.34***	.03	-.12	
	Family security	-.02	-.15	.01	
	Freedom	.12	-.17	.05	
	Happiness	-.16	.07	-.16	
	Inner harmony	.11	-.16	.09	
	Mature love	-.17	-.02	.05	
	National security	-.07	-.03	.03	
	Pleasure	-.23*	.06	-.12	
	Salvation	.04	.35***	-.06	
	Self-respect	.18	-.29**	-.16	
	Social recognition	-.25*	.05	-.01	
	True friendship	.07	.21*	-.11	
Wisdom	.05	-.22*	.07		
	Materialism	1.00	-.12	-.15	.88
Sample 4 (n = 193)	Life satisfaction	-.41***	.05	.16	.87
	Materialism	1.00	-.40	.12	.80
Sample 5 (n = 87)	Voluntary simplicity	-.56***	0.32**	.16	.48
	Materialism	1.00	-.32**	-.07	.85

Note * $p < .05$; ** $p < .01$; *** $p < .001$.

point biserial correlations, where male = '1', female = '2'.

^ Scores between rankings of Rokeach values and materialism are interpreted opposite to the sign. For example, Rokeach items positively correlated with materialism tended to be ranked lower in importance, and vice versa for negative correlations.

Full intercorrelation tables for each study are available from the author.

& Kashima, 1991). That is, no culture could survive — as have traditional societies for centuries — without some consensus of thought and behaviour that could be classified as conformist.

The authors of the materialism instrument used in the current research reported no significant correlations between materialism and gender, marital status, household size, education, or income (Richins & Dawson, 1992), and the same was found for materialism and gender in the present studies. Hence, materialism would appear to be unaffected by the usual indicators of social and economic status. However, Richins and Dawson (1992) did report a negative correlation ($r = -0.19$) between materialism and age. Similarly, in the present research, correlations between materialism and age varied between $r = -0.12$ and -0.40 . Richins and Dawson (1992) concluded that this result was consistent with the notion that materialism decreased after middle age (see Belk, 1985). However, this may also be due to an age cohort effect in which people born during the Depression behave differently (i.e., have different values) compared to those born during and since the post-World War II 'baby boom' (Saunders, 2000).

The positive correlation between materialism and rankings of 'equality' supports the argument that comparisons in the consumer domain are made with the aim of determining relative success or failure, rather than determinations of equality. The importance of 'social recognition' to materialistic persons supports the notion that materialism is based largely on the process of social comparison (Saunders, 2001). Further, it would appear that materialists in Australia have a greater concern for 'pleasure' and a 'comfortable life' than either the environment they live in or the life it supports (i.e., biophilia), or a 'world of peace' or 'beauty'. Such findings do not appear to cast materialistic values and attitudes (nor the modern consumer-centric lifestyle they are associated with) in a very positive light, but are supported by the significant negative correlation between materialism and voluntary simplicity. These results provide some support for the propositions that materialists are self-centred (Belk, 1983) and more concerned with the pursuit of individual rather than communal welfare (Wachtel, 1983; although the results discussed above relating to psychological health and life satisfaction suggests that their efforts may be in vain).

However, a specific shortcoming regarding ranking of the Rokeach values used in Study 3 is that when the digit span of 7 or 8 items is exceeded, then rankings — especially those involving 18 items as in the present research — are likely to be adversely affected by inherent memory limitations. In the future, this aspect of the present study might be addressed by either replacing the ranking system with individual Likert ratings, or by randomising the order of items to be ranked. While the latter approach would not overcome the memory con-

found, it would at least average out its effects. Further, it must be remembered that correlations between variables do not show cause and effect. For example, the positive correlation between materialism and commercial television viewing in the present research might also be explained as due to materialistic persons being attracted to advertising material and so on. Also, researchers must be ever mindful of possible confounds — such as socioeconomic status, which was not measured in these studies and might still affect results in an Australian sampling frame despite the conclusions drawn by Richins and Dawson (1992) in their North-American samples — which could mediate the relationship between materialism and other variables examined in these studies, such as depression.

Future research in this area will also examine the relationship between materialism and other psychological variables, such as measures of self-esteem and self-monitoring. If persons who score high on materialism are more dependent on comparisons with others, then it might be reasonably hypothesised that they would also score lower on self-esteem. Some support for this might be found in Saunders, Munro and Bore (1998) who reported a significant negative correlation between scores on the same materialism index as used in the present studies and a measure of Maslow's Esteem level needs. This was interpreted as suggesting that the acquisition of material goods may be seen as a neurotic defence for unsatisfied esteem level needs. However, such a relationship between materialism and self-esteem — if indeed it does exist — might be moderated by individual's propensity to self-monitor, which involves scanning the environment and adjusting one's behaviour to fit (Yukl, 2006). Therefore, in a standard test market such as Newcastle in Australia (or in any modern, consumer-centric society), people who score high on self-monitoring might also be expected to score similarly highly on materialism as a reaction to their environment.

Finally, although it was noted in the introduction that materialism has been referred to as a predominant American value and also an Australian one, and that there is some suggestion that samples from both cultures might similarly endorse the same measure of materialism, it may be overly presumptuous to assume a priori that people in Australia and the United States share identical underlying conceptions of that construct. This could also be addressed in future crosscultural research on materialism (and perhaps including a broader sample of western cultures so that the question of ethnicity and its relationship to materialism might be better addressed).

References

- Beck, A., Ward, C., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives for General Psychiatry*, 4, 561–571.
- Beck, A., Rush, A., Shaw, B., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guildford Press.

- Beck, A., Steer, R., & Garbin, M. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8, 1, 77–100.
- Beck, A., Epstein, N., Brown, G., & Steer, R. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology*, 56, 6, 893–897.
- Beck, A., & Steer, R. (1988). *Beck Anxiety Inventory: Manual*. San Antonio: Harcourt Brace Jovanovich.
- Beck, A., & Steer, R. (1990). *Beck Anxiety Inventory: Manual*. San Antonio: Harcourt Brace Jovanovich.
- Belk, R. (1983). Worldly possessions: Issues and criticisms. *Advances in Consumer Research*, 10, 514–519.
- Belk, R. (1985). Materialism: Trait aspects of living in the material world. *Journal of Consumer Research*, 12, 265–280.
- Callan, V., Gallois, C., Noller, P., & Kashima, Y. (1991). *Social psychology*. Sydney, Australia: Harcourt Brace Jovanovich.
- Comrey, A. (1987). *Comrey Personality Scales Manual*. San Diego, CA: Edits.
- Cushman, P. (1990). Why the self is empty: Toward a historically situated psychology. *American Psychologist*, 45, 599–611.
- Diener, E., Emmons, R., Larsen, R., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75.
- Dollard, J., Doob, L., Miller, N., Mowrer, O., & Sears, R. (1939). *Frustration and aggression*. New Haven, CT: Yale University Press.
- Egeland, J., & Hostetter, A. (1983). Amish Study 1: Affective disorders among the Amish, 1976–1980. *American Journal of Psychiatry*, 87, 49–59.
- Fromm, E. (1947). *Man for himself: An enquiry into the psychology of ethics*. New York: Holt, Rinehart & Winston.
- Fromm, E. (1955). *The sane society*. New York: Holt, Rinehart, & Winston.
- Fromm, E. (1976). *To have or to be*. New York: Harper Collins.
- Funkhouser, G. (1989). Values changes necessary for a sustainable society. *Bulletin of Science, Technology & Society*, 9, 19–32.
- Harmon, W. (1996, July-August). Reassessing the economic assumption. *The Futurist*, 13–15.
- Hawkins, D., Neal, C., Quester, P., & Best, R. (1994). *Consumer behaviour: implications for marketing strategy*. Sydney, Australia: Irwin.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. London: Sage.
- Klerman, G. (1979). The age of melancholy. *Psychology Today*, 10, 37–88.
- Maccoby, M. (1972). Emotional attitudes and political choices. *Politics & Sociology*, 2, 209–241.
- Ray, J. (1975). Measuring environmentalist attitudes. *Australian & New Zealand Journal of Sociology*, 11(2), 70–71.
- Ray, J. (1984). Attitude to abortion, attitude to life and conservatism in Australia. *Sociology & Social Research*, 68(2), 236–243.
- Richins, M., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19, 303–316.
- Rokeach, M. (1973). *The nature of human values*. New York: Free Press.
- Saunders, S., Munro, D., & Bore, M. (1998). Maslow's hierarchy of needs and its relationship with psychological health and materialism. *South Pacific Journal of Psychology*, 10(2), 15–25.
- Saunders, S., & Munro, D. (2000). The construction and validation of a consumer orientation questionnaire (SCOI) designed to measure Fromm's (1955) 'Marketing Character' in Australia. *Social Behavior and Personality*, 28(3), 219–240.
- Saunders, S. (2000). *An examination of Fromm's (1955) marketing character and materialistic attitudes and their relationship to psychological health and contemporary issues*. Unpublished doctoral dissertation, University of Newcastle, Australia.
- Saunders, S., & Allen, M. (2000). Materialism and life satisfaction in Australia: Is more better? *South Pacific Journal of Psychology*, 12(1), 48–51.
- Saunders, S. (2001). Fromm's Marketing Character and Rokeach Values. *Social Behavior and Personality*, 29(2), 191–196.
- Scheiffelin, E. (1984). *The cultural analysis of depressive affect: An example from New Guinea*. Unpublished manuscript, University of Pennsylvania.
- Schumaker, J. (1996). Understanding psychopathology: Lessons from the developing world. In S. Carr & J. Schumaker (Eds.), *Psychology and the Developing World* (pp. 180–190). London: Praeger.
- Seligman, M. (1990). Why is there so much depression today? The waxing of the individual and the waning of the commons. In R. Ingram (Ed.), *Contemporary psychological approaches to depression* (pp. 1–9). New York: Plenum Press.
- Shama, A., & Wisenblit, J. (1984). Values of voluntary simplicity: Lifestyle and motivation. *Psychological Reports*, 55, 231–240.
- Spielberger, C., Johnson, E., Russel, S., Crane, R., Jacobs, G., & Worden, T. (1985). The experience and expression of anger: Construction and validation of an Anger Expression Scale. In M. Chesney & R. Rosenman (Eds.), *Anger and hostility in cardiovascular and behavioral disorders* (pp. 5–30). New York: Hemisphere.
- Spielberger, C., Ritterband, L., Sydemann, S., Reheiser, E., and Unger, K. (1995). Assessment of emotional states and personality traits: Measuring psychological vital signs. In J. N. Butcher (Ed.), *Clinical personality assessment: Practical approaches* (pp. 42–58). New York: Oxford University Press.
- Wachtel, P. (1983). *The poverty of affluence: A psychological portrait of the American way of life*. New York: Free Press.
- Williams, D., & Page, M. (1989). A multi-dimensional measure of Maslow's Hierarchy of Needs. *Journal of Research in Personality*, 23, 192–213.
- Yukl, G. (2006). *Leadership in organizations*. Upper Saddle River, NJ: Pearson, Prentice Hall.
- Zauszniewski, J. (1995). Health-seeking resources in depressed outpatients. *Archives of Psychiatric Nursing*, 9(4), 179–187.