BIASED RESPONDING, NEUROTICISM, AND PERCEIVED CONTROL AMONG OLDER ADULTS

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ABSTRACT

Biased responding has been identified as a significant factor in social psychological research. In addition to self-perceptions, this phenomenon appears to extend to beliefs regarding one's spouse and marriage as defined by the construct of marital aggrandizement. Results of the current study support the assertion that marital aggrandizement is a significant and distinct mode of biased responding. Participants presenting as biased responders appear to differ in terms of the trait of neuroticism, personal efficacy and perceived interpersonal control. Limitations of the use of the Internet as a means of data collection are considered.

INTRODUCTION

According to Linden, Paulhus, and Dobson (1986), it is prudent to include indices of biased responding in studies with self-report measures. In addition to questionnaires pertaining to individual beliefs and perceptions, participants can also distort responses to marital measures (Edmonds, 1967; O'Rourke, Hayden, Haverkamp, Tuokko, & Beattie, 1995). This can occur in face-to-face interviews as well as completion of anonymous surveys (Lautenschlager & Flaherty, 1990). The current study examines distinct groupings of response biases in relation to personality traits, dispositional optimism, and perceived control among older adults.

Biased responding is defined as a systematic tendency to present oneself favorably (Paulhus, 1991). Although traditionally perceived as a deliberate process, this phenomenon has come to be viewed as increasingly complex. In addition to purposeful distortion, participants may under-report various beliefs and behaviors with limited awareness. In this vein, Paulhus (1984) has
proposed a two-component model of biased responding. In addition to *impression management* (i.e., conscious dissembling or purposeful distortion), persons may also engage in *self-deception* (i.e., an honest, yet overly positive self-presentation). This distinction suggests that biased responding is not solely intentional but also reflects a self-protective, psychological strategy. In other words, some may choose to present themselves favorably, whereas others convey an overly positive self-image that they honestly endorse (Paulhus, 1984).

More recently, O'Rourke and Wenaus (1998) have identified and defined a distinct interpersonal mode of biased responding. *Marital aggrandizement* is defined as a relationship-specific response style by which persons convey an inordinately positive portrayal of their spouse and marriage. In effect, marital aggrandizement entails a propensity to discount negative perceptions of one's marital history. This construct is hypothesized to be distinct from individually mediated response biases. Marital aggrandizement is thus a systems-based construct (i.e., occurring within relationships). It is believed that those who convey idealized depictions of their relationship invariably provide exaggerated responses to other marital measures; however, contentment within marriage does not necessarily entail aggrandizement of one's relational history.

Marital aggrandizement may best be understood within context of Brandtstädter's (1999) model of resilience and adaptation. According to this theory, personal continuity and integrity across the lifespan are achieved with the aid of assimilative, accommodative, and immunizing cognitive processes. It is the latter which captures the essence of marital aggrandizement. According to Brandtstädter (1999), immunizing mechanisms serve to protect well-entrenched beliefs and ideals to which the individual is strongly committed, even in the face of information to the contrary. When situations cannot be proactively mediated (or the past changed), ego entrenched beliefs remain intact despite what might otherwise be construed as *reality*. In this way, subjective reality is maintained to sustain well-being and to promote the ability to cope adaptively with loss. For instance, spousal caregivers appear to engage in selective recall of their relationship histories to contend with current circumstances beyond their control such as the terminal illness of a spouse (O'Rourke et al., 1996; O'Rourke & Wenaus, 1998).

As an immunizing cognitive process, marital aggrandizement like self-deception is assumed to occur outside of awareness. Persons do not purposefully recreate the past as a deliberate strategy; instead, selective recall is believed to be a means by which self-referent beliefs and ideals can be maintained when more proactive strategies are seen to be outside of one's capacity. According to Brandstädter and Rothermund (1994), persons can change their circumstances (i.e., assimilative processes) or adjust their beliefs and ideals (i.e., accommodative processes) should these strategies be within their perceived grasp. For the current study, I hypothesize that this phenomenon can occur specific to oneself, one’s marriage, or exist globally across both personal and interpersonal contexts. In other words, marital aggrandizement may be observed along with other indices of biased responding or emerge as distinct from both self-deception and impression management.

I further hypothesize that immunizing self-processes are associated with specific personality variables. For instance, an inverse association is believed to exist between the personality trait of
neuroticism and marital aggrandizement. Existing research indicates that those high in the trait of neuroticism impose a negativity bias upon both the encoding and recall of personally relevant information (Larsen, 1992). I hypothesize the corollary; that is, the relative absence of neuroticism is believed to be associated with an overtly positive depiction of oneself and one’s marriage.

This phenomenon is hypothesized to extend to the constructs of dispositional optimism and perceived control. Those exhibiting high levels of immunizing cognitive processes are believed to portray a rosier future for themselves and express greater personal efficacy (Heckhausen & Schulz, 1995). Moreover, those presenting as higher in marital aggrandizement are believed to convey a tendency for greater perceived control in interpersonal contexts in keeping with the operational definition of this systems-based construct. In contrast, perceived personal efficacy is hypothesized to be more closely associated with individually mediated response biases (i.e., self-deception, impression management).

**METHOD**

**Participants**

A total of 200 older married adults were recruited as part of an ongoing study of marriage in later life (90 men, 110 women). The average age of participants was 64.7 years ($SD = 9.33$, range 50 to 96) with 15.1 years of formal education on average ($SD = 3.30$, range 4 to 25). Participants had been married an average of 38.8 years ($SD = 10.4$, range 20 to 61). The majority had retired from the paid workforce (62.7%) though a notable proportion continued to work on either a full- or part-time basis (37.3%). More than half identified their religious affiliation as Protestant (53%), with a further 21% who self-identified as atheists or agnostics. The sample is also composed of a smaller numbers of Roman Catholics, Hindus, Muslims, Jews and Buddhists.

*Printed-Page Participants*

A total of 56 participants completed the printed-page version of study questionnaires. These respondents were recruited through media advertisements, notices appearing in seniors' publications, contacts with community groups, and word-of-mouth. The majority of questionnaires were returned (i.e., 57 of 66 or 84.6%). Most likely, this higher than average rate of response is due to the fact that prospective participants expressed interest, or agreed to take part, before questionnaires were mailed to them.

*Internet Participants*

A website constructed specifically for this study provided 144 sets of responses. Data were forwarded automatically via e-mail as participants proceeded from one page to the next. Questionnaires were routed through the Internet service provider thus masking the e-mail address and time zone in which responses originated.

Postings announcing this study were placed at dedicated websites for seniors (e.g., American Association of Retired Persons, SeniorNet, 50+ Net, Age of Reason). Direct appeals were also
made to older adults seeking e-mail pen-pals, a request for participants was placed in an Australian electronic senior's newsletter, and reciprocal links were placed between this website and others directed to older adults.

Of those who identified their country of origin, more than 70% indicated that they lived in the United States (34 of 50 states). Participants from Canada, England, Austria, India, Sri Lanka, Australia and New Zealand were also recruited.

Of note, Internet and printed-page participants appear indistinguishable. Not only are responses to study measures statistically similar, but few demographic differences appear between groups. For instance, the gender composition of the groupings does not differ (chi-square [1, N=200] = 2.38, ns), years of formal education (t[195] = 1.75, ns), nor socioeconomic categorization based upon work performed either now or prior to retirement (chi-square [10, N=200] = 14.9, ns). Consistent with our prior findings, older adults providing responses via the Internet do not appear distinct from those recruited by means of more traditional methodology such as community centers and seniors housing complexes (O’Rourke & Cappeliez, 2002; 2003). Responses were combined for subsequent analyses given the similarity between printed-page and Internet participants.

MEASURES

*Balanced Inventory of Desirable Responding - Version 6*

The Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1994) is a 40-item self-report measure comprised of two 20-item subscales (i.e., self-deception and impression management). Respondents rate their degree of agreement to each statement along 7-point Likert-type scales with one point assigned for each six or seven response subsequent to reversal of negatively-keyed items (e.g., "I don't care to know what other people really think of me;" "I have done things that I don't tell other people about" from the self-deception and impression management subscales respectively).

As reported by Paulhus (1991), correlation coefficients between subscales range from r = .05 to r = .40. Internal consistency of responses ranges from alpha = .65 to .75 for the SD subscale and alpha = .75 to .80 for the IM subscale (Paulhus, 1994).

BIDR responses have been shown to correlate significantly with the Marlowe-Crowne Social Desirability Scale (r = .73; Paulhus, 1994) and the Multidimensional Social Desirability Inventory (r = .80; Paulhus, 1991). Convergent validity of responses to the IM subscale has been established relative to the Lie Scale of the Minnesota Multiphasic Personality Inventory (Paulhus, 1994). Response levels to the IM subscale also show marked increase from private to public response conditions. As expected, less variability is apparent for responses to the SD subscale (Lautenschlager & Flaherty, 1990). These findings appear to differentiate response sets and thus support the construct validity of subscales.
Marital Aggrandizement Scale

The Marital Aggrandizement Scale (MAS; O’Rourke, 2002b) was developed as a couples measure of biased responding. The 18 MAS items were written in extreme terms such that they cannot be endorsed without conveying an inordinately positive depiction of the marriage. (See Appendix 1.) Respondents indicate agreement to each statement upon a 7-point Likert-type scale. Only upper-end responses (i.e., 6 or 7) are tallied (subsequent to reversal of four negatively-keyed items). MAS totals range from 0 to 18 with higher scores suggestive of greater marital aggrandizement. It is assumed that those attaining elevated MAS scores are incapable or unwilling to acknowledge negative interpersonal memories or perceptions. As such, the accuracy of responses to other marital measures is suspect (O’Rourke & Cappeliez, 2002).

Estimates of internal consistency have been measured as alpha = .84. Test-retest reliability of responses has been reported as r(200) = .80 over an average interval of 16 months (O’Rourke & Cappeliez, 2002). Responses to the MAS also appear to be gender invariant. In other words, men and women seem to interpret and respond to MAS items in a similar manner (O’Rourke & Cappeliez, 2001). These findings suggest that responses to the MAS reliably reflect biased responding.

Data in support of the convergent validity of responses to the MAS has been reported relative to the BIDR (O’Rourke & Cappeliez, 2002). Although responses to the marital aggrandizement have been shown to load upon the same latent construct as self-deception and impression management, the contribution of the MAS is significant and independent of these individually mediated response biases (O’Rourke & Cappeliez, 2002).

Spheres of Control Scale

A substantive body of research suggests that perceived control contributes significantly to health and well-being (see Reich & Zautra, 1991 for a review). The majority of measures, however, do not distinguish between perceived individual and interpersonal control. As suggested by Paulhus (1983), these perceptions exist within circumscribed domains. Thus an individual may perceive considerable self-efficacy in terms of his or her ability to attain personal goals and objectives; this may not correspond to perceived control within interpersonal contexts.

The Spheres of Control Scale - Version 3 (SOC-3; Paulhus & Van Selst, 1990), is a 30-item instrument that delineates perceptions of control within separate domains. Interpersonal control (IPC) is measured separately from personal efficacy (PE). In addition, this scale measures perceived socio-political control (i.e., the ability to affect change of social institutions). The latter was not administered participants recruited for the current study, as this construct was deemed tangential to stated hypotheses.

Responses are gauged upon a 7-point Likert-type scale to which respondents indicate their degree of agreement for each of the 20 items (alpha = .80). Paulhus and Van Selst (1990) report a
low correlation between IPC and PE subscales ($r = .33$). This coefficient suggests that perceptions of control differ between personal and interpersonal domains (e.g., "I find it easy to play an important part in most group situations;" "I can usually achieve what I want when I work hard for it" respectively).

Construct validity of responses to each subscale has been established relative to existing measures. For instance, the IPC subscale correlates significantly with separate indices of social self-efficacy and social competence (Paulhus & Van Selst, 1990).

The initial validation study demonstrated discriminant validity of responses among subscales. For example, varsity athletes who play team sports (e.g., American football) were shown to score significantly higher on the IPC subscale as compared to tennis players for whom PE was elevated (Paulhus, 1983).

**Life Orientation Test - Revised**

The Life Orientation Test - Revised (LOT-R; Scheier, Carver, & Bridges, 1994) is a 10-item measure of dispositional optimism. Six core items are scored upon a 5-point Likert-type scale. The remaining four are included to obscure the intent of this scale. Core items are evenly divided between negatively- and positively-worded items. Total scores range from 0 to 24 with higher totals suggestive of greater optimism (e.g., "In uncertain times, I usually expect the best;" "I'm always optimistic about my future").

Internal consistency of responses to the LOT-R by older women is reported as alpha = .85 (O'Rourke, in press). The LOT-R also appears stable over time as test-retest reliability has been measured as $r = .79$ over a 28 month interval (Scheier et al., 1994).

Existing research suggests that responses to the LOT-R tap a construct distinct from established personality traits. As reported by Scheier and colleagues (1994), only modest correlations emerge between the LOT-R and measures of neuroticism, self-esteem and trait anxiety (range $r = -.35$ to $r = .54$). These coefficients suggest convergent and discriminant validity of responses to the LOT-R.

**NEO Five-Factor Inventory**

The Revised NEO Personality Inventory and the short-form NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1989) have been described as the definitive measures of normal adult personality (Juni, 1995).

Norms for these measures are based on a sample of 1,000 participants stratified to match 1995 U.S. census projections (Botwin, 1995). The items selected for the NEO-FFI constitute those with the strongest loadings relative to each factor. Reported reliability coefficients of responses range from alpha = .86 to .95. Test-retest reliability coefficients approach these levels over brief
periods. As reported by Costa and McCrae (1985), this has also been documented over many years for the constructs of neuroticism, extraversion, and openness to experience (e.g., "I often feel inferior to others;" "I really enjoy talking to people;" "I have a lot of intellectual curiosity" respectively).

Consensual validity of responses has been established among self, peer, and spousal ratings for the long form of the instrument (Forms S or self-report; R or observer). Construct validity of responses has been shown relative to other measures such as the California Psychological Inventory while divergent validity of responses has been demonstrated vis-à-vis psychopathology scales (e.g., Millon Clinical Multiaxial Inventory). As stated by Botwin (1995), the factor structure and psychometric properties of the NEO-FFI make it well suited for clinical and research applications.

Table 1. Correlation Coefficients and Significance Levels of Study Variables (N = 200)

<table>
<thead>
<tr>
<th>Variables</th>
<th>IM</th>
<th>SD</th>
<th>MAS</th>
<th>NEO-N</th>
<th>NEO-E</th>
<th>NEO-O</th>
<th>LOT-R</th>
<th>PE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td></td>
<td>.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(.01)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAS</td>
<td>.27</td>
<td>.49</td>
<td>(.01)</td>
<td>(.01)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEO-N</td>
<td>-.17</td>
<td>-.37</td>
<td>-.31</td>
<td>(.02)</td>
<td>(.01)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEO-E</td>
<td>.10</td>
<td>.16</td>
<td>.13</td>
<td>-.46</td>
<td>(.15)</td>
<td>(.02)</td>
<td>(.05)</td>
<td>(.01)</td>
</tr>
<tr>
<td>NEO-O</td>
<td>-.07</td>
<td>-.04</td>
<td>-.19</td>
<td>-.20</td>
<td>.18</td>
<td>(.36)</td>
<td>(.56)</td>
<td>(.01)</td>
</tr>
<tr>
<td>LOT-R</td>
<td>.16</td>
<td>.23</td>
<td>.19</td>
<td>-.65</td>
<td>.46</td>
<td>.22</td>
<td>(.03)</td>
<td>(.01)</td>
</tr>
<tr>
<td>PE</td>
<td>.20</td>
<td>.41</td>
<td>.32</td>
<td>-.46</td>
<td>.40</td>
<td>.19</td>
<td>.50</td>
<td>(.01)</td>
</tr>
<tr>
<td>IPC</td>
<td>.22</td>
<td>.39</td>
<td>.30</td>
<td>-.56</td>
<td>.48</td>
<td>.16</td>
<td>.44</td>
<td>.55</td>
</tr>
</tbody>
</table>

Note. IM = Balanced Inventory of Desirable Responding - Impression Management, SD = Balanced Inventory of Desirable Responding - Self-Deception, MAS = Marital Aggrandizement Scale, NEO-N = Five-Factor Personality Inventory - Neuroticism, NEO-E = Five-Factor Personality Inventory - Extraversion, NEO-O = Five-Factor Personality Inventory - Openness to
ANALYTIC PROCEDURE

For this study, cluster analysis was used to identify unique participant groupings on the basis of responses to indices of biased responding (i.e., impression management, self-deception and marital aggrandizement). Ward's hierarchical method was used to maximize within-group similarity (cf. Majerovitz, 1995). According to the hypotheses of this study, clusters should emerge which represent distinct configurations of biased responders. Furthermore, these groupings should differ vis-à-vis the trait of neuroticism, dispositional optimism, and perceived control.

RESULTS

Cluster Composition

A 3-cluster solution was identified on the basis of responses to each measure of biased responding. The viability of this 3-cluster solution was supported by Multivariate Analysis of Variance (MANOVA; Hotelling’s $T = 1.98, p < .01$). Self-deception ($F[2,197] = 82.1, p < .01$), impression management ($F[2,197] = 110.7, ns$), and marital aggrandizement ($F[2,197] = 53.3, p < .01$) each differ significantly across all clusters (least significant difference post-hoc comparisons).

Due to unequal group membership (a function of hierarchical cluster formation), discriminant function analysis was also performed. Ninety percent of participants were accurately classified (chi-square $[6, N=200] = 244.9, p < .01$) within their respective groupings (i.e., 179 of 200 participants).

The largest grouping provided low scores for each measure of biased responding ($n = 133$ or 67%). These participants convey low average totals for marital aggrandizement as well as both individually mediated response biases. Given this profile, this cluster is identified as *global realists*.

Table 2. Descriptive Features of Participant Groupings ($N = 200$)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Global Realists ($n = 133$)</th>
<th>Biased Responders ($n = 51$)</th>
<th>Circumscribed Aggrandizers ($n = 16$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$M (SD)$</td>
<td>$M (SD)$</td>
<td>$M (SD)$</td>
<td></td>
</tr>
<tr>
<td>Scale</td>
<td>Mean</td>
<td>Standard Deviation</td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------</td>
<td>--------------------</td>
<td></td>
</tr>
<tr>
<td>BIDR Impression Management</td>
<td>6.77</td>
<td>(2.90)</td>
<td></td>
</tr>
<tr>
<td>BIDR Self-Deception MAS</td>
<td>4.74</td>
<td>(2.74)</td>
<td></td>
</tr>
<tr>
<td>Marital Aggrandizement</td>
<td>3.79</td>
<td>(2.91)</td>
<td></td>
</tr>
<tr>
<td>NEO Neuroticism</td>
<td>8.36</td>
<td>(6.79)</td>
<td></td>
</tr>
<tr>
<td>NEO Extroversion</td>
<td>38.7</td>
<td>(6.67)</td>
<td></td>
</tr>
<tr>
<td>NEO Openness to Experience</td>
<td>42.5</td>
<td>(7.04)</td>
<td></td>
</tr>
<tr>
<td>Dispositional Optimism</td>
<td>6.67</td>
<td>(7.41)</td>
<td></td>
</tr>
<tr>
<td>(LOT-R)</td>
<td>4.01</td>
<td>(7.04)</td>
<td></td>
</tr>
<tr>
<td>Personal Efficacy (SOC-3)</td>
<td>49.7</td>
<td>(7.04)</td>
<td></td>
</tr>
<tr>
<td>Interpersonal Control (SOC-3)</td>
<td>45.8</td>
<td>(7.04)</td>
<td></td>
</tr>
</tbody>
</table>

Note. BIDR = Balanced Inventory of Desirable Responding, MAS = Marital Aggrandizement Scale, NEO = Five-Factor Personality Inventory, LOT-R = Life Orientation Test - Revised, SOC-3 = Spheres of Control - Version 3.

In contrast, the second largest grouping presents with elevated responses to each measure (n = 51 or 26%). These participants endorse a greater number of self-deception, impression management, and marital aggrandizement items vis-à-vis overall sample means. Given this generalized pattern, these participants are labeled as biased responders.

The final cluster is identified as circumscribed aggrandizers. They endorse the highest average number of MAS items with comparatively lower self-deception and impression management response levels. This grouping emerged as the smallest of the three (n = 16 or 8%).

Of note, cluster composition does not differ by age (F[2,197] = 2.48, ns), gender (chi-square [2, N=200] = 3.94, ns), years married (F[2,197] = 1.93, ns), years of formal education (F[2,197] = 1.83, ns), nor socioeconomic status based upon work performed either now or prior to retirement (chi-square [10, N=195] = 6.43, ns). This suggests that cluster membership is not determined by demographic factors.

**Biased Responding and Personality**

In contrast, a significant multivariate difference emerged across groups for personality variables (MANOVA; Hotelling’s T = .11, p < .01). Univariate analyses indicate that this difference is attributable solely to the trait of neuroticism (F[2,197] = 6.78, p < .01). Post-hoc comparisons
indicate a significant difference between global realists and biased responders. Circumscribed aggrandizers do not differ from either of the other two clusters.

As hypothesized, a significant difference emerged across groups for dispositional optimism, personal efficacy, and perceived interpersonal control (MANOVA; Hotelling’s $T = .13, p < .01$) with univariate significance observed for each of these variables. To determine whether or not this result is independent of personality, this analysis was repeated controlling for the effect of neuroticism (MANCOVA; Hotelling’s $T = .90, p < .01$). Personal efficacy ($F[2,196] = 4.66, p = .01$) and perceived interpersonal control ($F[2,196] = 3.60, p < .05$) retained univariate significance. Optimism, however, no longer achieves statistical significance subsequent to covariation for neuroticism ($F[2,196] = .07, ns$).

Post hoc analyses were computed. Again, significant group differences were found between biased responders and global realists with the former expressing elevated responses to both control constructs. Contrary to expectation, interpersonal control did not emerge as significantly elevated among circumscribed aggrandizers. For both personal efficacy and interpersonal control, response levels were highest among those expressing a generalized tendency for biased responding. This finding fails to support the hypothesis that perceived control within interpersonal domains would distinguish those defined on the basis of elevated marital aggrandizement; instead, perceived control appears to be a generalized tendency irrespective of context.

DISCUSSION

The results of this study provide general support for study hypotheses. As assumed, distinct groupings emerged with marital aggrandizement elevated along with other indices of biased responding, and with marital aggrandizement alone. The composition of clusters supports the assertion that marital aggrandizement is distinct yet related to individually mediated response biases (i.e., self-deception, impression management).

As also assumed, the personality of biased responders differs from global realists as the absence of neuroticism distinguishes the former. This result is in accord with the findings previously reported by Larsen (1992) in which persons high in neuroticism appear to impose a negativity bias upon the encoding and recall of personally relevant information; as a corollary, the current study suggests the relative absence of neuroticism is also associated with an information processing bias reflecting an overly positive self-image and elevated perceptions of control. Consistent with the revised theory of cognitive adaptation, individual personality differences appear to create propensities for selective processing and recall of personally relevant information such as one's spouse and marriage (see O'Rourke, 2002a; in press).

A competing explanation would contend that this phenomenon results as function of individuals' desire to purposefully convey this impression (i.e., low neuroticism, high perceived control). The
relative elevation of both impression management and self-deception, however, suggests that biased responding is not motivated exclusively by a desire to present oneself favorably.

Contrary to the initial hypothesis, perceived control within interpersonal contexts does not appear to distinguish circumscribed aggrandizers from other participants; instead, control across domains appears associated with a generalized tendency for biased responding. This phenomenon occurs over and above statistical control for the trait of neuroticism. In contrast, optimism no longer differs across groups. This finding supports the assertion of prior research that optimism may simply reflect the absence of neuroticism (Boland & Cappeliez, 1997; Smith, Pope, Rhodewalt, & Poulton, 1989).

**Generalizability and Limitations of Findings**

Despite study findings that indicate significant between group differences, it should be noted that the size of clusters varies substantively. This observation is particularly germane to circumscribed aggrandizers (i.e., \( n = 16 \)). Ideally, this cluster would have been considerably larger in order to guard against Type I or alpha errors (Cohen, 1992). Attempts to replicate these study findings should attempt to recruit more equal participant groupings.

This study uses the Internet as a means of data collection with older adults. This methodology has allowed for the recruitment of participants over four continents. Although a significant proportion of respondents identified their country of origin, roughly one-third did not provide geographic information. This precluded nation-by-nation comparisons. As a result, country-specific patterns of response cannot be identified.

Use of the Internet affords participants considerable anonymity advantageous in studies of biased responding (Paulhus, 1991). With added anonymity, however, comes concern regarding misrepresentation. Even though the title page of the website requested the assistance of persons over 49 years of age who had been married more than 19 years, it cannot be stated definitively that all respondents met these inclusion criteria. On the basis of demographic information provided on the final questionnaire, for instance, two widowed persons were identified and excluded.

Nor can it be said that this study is representative of the current cohort of older adults given that participants had completed an average of 15.1 years of education. This grouping is more educated than the norm, as the majority had undertaken some post-secondary training. Similar to most research with self-selected participants, persons choosing to take part in the current study are more educated than the population from which they are drawn. This limits generalizability as responses may not correspond to older adults with less education. Therefore, responses may differ from the broader population. This observation underscores the need to replicate the cluster composition and between-group differences with other samples and research methodologies (e.g., recruitment of randomly identified participants).

Despite these limitations, the current study provides further support for the assertion that marital aggrandizement exists as a distinct response bias. This tendency to negate the occurrence of negative interpersonal beliefs and perceptions occurs not only among spousal caregivers but also
within a heterogeneous sample of older adults. Persons classified on the basis of responses to 
indices of biased responding appear to differ significantly in personality and perceived control. 
These findings provide further indication of the antecedents of biased responding (O'Rourke, 
2002a; in press). The challenge remains to ascertain if current study findings can be replicated 
with other samples and populations such as younger adults and same-gender couples.

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APPENDIX 1

Marital Aggrandizement Scale

Using the scale below as a guide, select the number beside each statement to indicate which applies to you, your spouse, or your relationship.

1. I cannot imagine having married anyone other than my spouse
   1 2 3 4 5 6 7

2. My marriage has not been a perfect success *
   1 2 3 4 5 6 7
3. There is never a moment I don’t feel completely in love with my spouse
4. I have been completely honest at all times with my spouse throughout our marriage
5. Most times, I know what my spouse is thinking before uttering a word
6. My spouse has never made me angry
7. If my spouse has any faults, I am not aware of them
8. I do not recall a single argument with my spouse
9. My spouse and I understand each other perfectly
10. I have never known a moment of sexual frustration during my marriage
11. My spouse and I sometimes annoy each other *
12. My spouse has never made me unhappy
13. Some of my dealings with my spouse are prompted by selfish motives
14. I have never regretted my marriage, not even for a moment
15. I always place the needs and wishes of my spouse before my own
16. I have never imagined what it would be like to be intimate with anyone other than my spouse
17. My marriage could be happier than it is *
18. If every person in the world had been available and willing to marry me, I could not have made a better choice

Note. Asterisked items are reverse-keyed.
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