

THE UNIVERSITY OF CALGARY

**Construction and Validation of a Self-Report Measure
of Exaggerated Deservingness: The XD21**

by

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Abstract

Three studies provided evidence of the validity of a self-report scale measuring Exaggerated Deservingness (XD), a construct best conceptualized as a personality trait representing an individual's attitude towards personal entitlement. Exaggerated deservingness represents a self-serving attitude that one is always entitled to the most advantageous outcomes.

A sample of 303 university undergraduates (age: $M = 20.05$, $SD = 3.66$; 220 females) participated in Study 1, obtaining information on the psychometric characteristics and construct validity of the newly developed Exaggerated Deservingness scale 21 item (XD21). The XD21 yielded excellent psychometric characteristics and correlated positively with feelings of superiority, Machiavellian attitudes, and need for uniqueness, and negatively with willingness to engage in self-sacrificing behaviour and ability to delay gratification. As evidence of divergent validity, the XD21 was uncorrelated with a measure of global self-esteem.

Study 2 employed 72 females and 37 males (age: $M = 19.69$, $SD = 3.31$) including 53 pairs of friends/partners. By modifying the XD21 so it could be used to rate a friend/partner, a significant ($p < .01$) self-observer correlation ($r = .31$) was obtained, indicating that XD rated by an observer is significantly related to self-report. Study 2 also examined participants' frequency of engaging in behaviours considered exemplars of XD. Self-reported XD21 scores were significantly correlated with motor-vehicle ($r = .22$, $p < .05$) and interpersonally intrusive ($r = .23$, $p < .05$) behaviours.

Forty-nine females and 16 males from Study 2 participated in Study 3 (age: $M = 19.64$, $SD = 3.52$), an ostensible motor-coordination study where participants rewarded

themselves upon completion. Because individuals higher in XD may determine entitlement by examining what the highest paid predecessor received, experimental conditions differed in the information participants received about prior payment. The XD21 predicted behaviour best when situational cues indicated the possibility of preferential rewards (i.e., there is a higher paid group) and the situation was not highly constrained (i.e., equal possibility of identification with either the high or low paid group). A summary of XD personality, possible sex differences, and suggestions for future research are included.

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Table of Contents

Approval Page.....	ii
Abstract	iii
Acknowledgements.....	v
Table of Contents.....	vii
List of Tables.....	xi
List of Figures.....	xii
Epigraph	xiii
INTRODUCTION.....	1
The Psychology of Deservingness	2
Overview.....	2
Deservingness Continuum.....	4
Origins of Exaggerated Deservingness.....	7
Birth Order.....	9
Compensatory versus Privileged Deservingness.....	10
Uniqueness	11
Summary	11
Exaggerated Deservingness (XD): A Scale	13
Summary of the Research	14
STUDY ONE: OVERVIEW	14
Construction of the Exaggerated Deservingness Scale.....	17
Method	17
Participants	17
Procedure.....	18
Psychometric Properties of the Exaggerated Deservingness Scale	19
Item Selection	19

Distribution of XD21 Scores	21
Reliability of the XD21.....	21
Factor Analysis of the XD21	21
Measures.....	21
Interpersonal Orientation Scale.....	24
MACH-IV	24
Need for Uniqueness.....	25
Self-Sacrifice Scale	27
Superiority Scale.....	27
Unidimensional Scales.....	28
Results and Discussion.....	28
Construct Validity of the XD21	28
Convergent Validity	28
Divergent Validity.....	31
Sex Differences	32
Origins of Exaggerated Deservingness.....	33
Summary	35
STUDY TWO: OVERVIEW.....	36
Method.....	37
Participants	37
Measures.....	37
XD21.....	37
Equity Sensitivity Instrument.....	37
Personality Attributes Questionnaire.....	38
Behavioural Exemplars of Exaggerated Deservingness (BXD).....	38
Procedure.....	39

Results and Discussion.....	40
Confirmation of XD21 Operating Characteristics.....	40
Observer Validity	41
XD21 and Equity Sensitivity	43
XD21 and the Frequency of Self and Observer-Rated Behaviours.....	43
STUDY THREE: OVERVIEW.....	48
Method.....	50
Participants	50
Materials	51
Motor-Coordination Task.....	51
Music.....	51
Stopwatch.....	51
Raffle Tickets, Draw Box, and Raffle Sheet	51
Procedure.....	52
Results and Discussion.....	55
Equivalence of Raffle List Conditions	55
Raffle Ticket Index of Deservingness.....	56
Number of Raffle Tickets Selected	57
Relationship Between Number of Raffle Tickets Selected and XD21 ...	59
Participants' Perception of Performance.....	61
GENERAL DISCUSSION.....	63
XD21 Profiles.....	63
Sex Differences	64
Exaggerated Deservingness: Disorder or Personality Variable?.....	65
Exaggerated Deservingness: Dispositional versus Situational Variance.....	67
Limitations of Current Research	68

Suggestions for Future Study	68
Populations	68
Actual Behaviour.....	69
Replication of Raffle Ticket Study	70
Measures of Well-Being and the XD21	70
Birth Order.....	71
Privileged versus Compensatory XD.....	71
Developmental Considerations	72
Unidimensionality of the XD21	72
Conclusion	73
ENDNOTES.....	74
REFERENCES	75
Appendix A.1: Factor Loadings for the Deferment of Gratification Scale.....	82
Appendix A.2: Factor Loadings for the Interpersonal Orientation Scale	83
Appendix A.3: Factor Loadings for the Machiavellian-IV Scale	85
Appendix A.4: Factor Loadings for the Marlowe-Crowne Social Desirability Scale (short form).....	86
Appendix A.5: Factor Loadings for the Need for Uniqueness Scale	87
Appendix A.6: Factor Loadings for the Self-Sacrifice Scale.....	89
Appendix A.7: Factor Loadings for the Superiority Scale	90
Appendix A.8: Factor Loadings for the Rosenberg Self-Esteem Scale.....	91
Appendix B.1: Correlations Matrix of all Additional Scales (N = 303)	92
Appendix C.1: Factor Loadings for Items on the Behavioural Exemplars of Exaggerated Deservingness Scale.....	94

List of Tables

Table 1	Exaggerated Deservingness Scale factor loadings for full, male, and female samples.....	20
Table 2	Cronbach's alphas and factor analysis results for existing scales.....	26
Table 3	Correlations between the XD21 and other measures.....	29
Table 4	XD21 means and standard deviations by order of birth and sex.....	34
Table 5	Correlations for the total, male, and female samples of the XD21 and Equity Sensitivity Index both self and other rated versions.....	45
Table 6	Correlation of XD21 with behavioural exemplars of exaggerated deservingness factors both self and other rated	47
Table 7	Raffle lists and selected statistics for numbers of raffle tickets taken and XD21 scores.....	54
Table 8	Condition by condition correlations for post-test measures and XD21 scores with the number of raffle tickets selected	58
Table 9	Correlation matrix of post-test measures and XD21 scores ($N = 65$)	62

List of Figures

Figure 1	Conceptualization of a continuum of deservingness.....	8
Figure 2	Paths to exaggerated deservingness	12
Figure 3	Distribution of XD21 scores ($N = 303$).....	22
Figure 4	Scree plots of the XD21 factor analysis for total, ($N = 303$), male ($n = 83$), and female ($n = 220$) samples	23
Figure 5	Distribution of self-rated XD21 scores for Study 2 ($N = 109$).....	42
Figure 6	Distribution of other-rated XD21 scores for Study 2 ($N = 109$)	44

Epigraph

ex-ag-ger-at-ed (ig zaj'ð rä'tid) - 1. unduly magnified: *to have an exaggerated opinion of oneself.* 2. abnormally increased or enlarged

(adapted from Webster's Encyclopedic Unabridged Dictionary of the English Language, 1989, p. 496, italics in original)

de-serve (di zûrv) - 1. to merit, be qualified for, or have a claim to . . . because of one's acts, qualities, or situation . . .; 2. to be worthy of, qualified for, or have a claim to reward, punishment, recompense, etc.

(adapted from Webster's Encyclopedic Unabridged Dictionary of the English Language, 1989, p. 391)

Construction and Validation of a Self-Report Measure of Exaggerated Deservingness: The XD21

The notion of deservingness is based on the idea that an individual receives the outcome to which s/he is entitled (Lerner, 1980). For the most part, people can readily understand and make judgments about the deservedness of various outcomes. Lerner (1980) provided the following description of the conceptual underpinnings of deservingness:

A Person "P" deserves outcome "X" if P has met the appropriate preconditions for obtaining X. What is implied, also, is that P desires X. If P does not get X, or receives something of less value than X, then P has not received all he or she deserves. (p. 11)

Lerner acknowledges that the determination of deservingness, although deceptively straightforward, is a rather complex process. Inputs rarely can be quantified in such a way as to be meaningfully compared to outcomes. When we state that a good Samaritan *deserves* recognition for her deeds we are making a complex socially-driven decision about how society should respond to a particular class of behaviour. Furthermore, individuals often do not agree on what is deserved. If a good Samaritan rescues a cat from a tree some may say that action is deserving of praise while others believe the individual should have minded her own business and thus is not deserving of anything!

Given the complexity of deservingness, it is somewhat surprising that most individuals confidently make claims for what is deserved. It does not appear to be problematic for individuals to determine what is deserved for oneself or for others. The media invokes deservingness at either an individual or group level almost everyday. The employees of a major grocery chain threaten to go on strike because they *deserve* more money and more work hours. Individuals comment on how notorious convicted criminals (e.g., Paul Bernardo, Clifford Olsen) deserve to "rot in prison". Teachers,

nurses, and government workers have all recently made headlines in the news demanding increased salaries, more secure jobs, better benefits, and so on. People even lay claim to things over which they have no control, e.g., "We deserve some good weather!"

Issues of deservingness are not new but in recent years the psychology of deservingness has received increasing attention in the psychological literature (Kriegman, 1983; Watson, Hickman, Morris, Milliron, & Whiting, 1995). The psychology of what people think they deserve has been framed in terms of the individual difference variable of selfism (Phares & Erskine, 1984), the pathological component of narcissism (American Psychiatric Association, 1994; Watson & Biderman, 1993), or incorporated into a comprehensive theory of how people "orient themselves to their environment" (Lerner, 1980, p. 9). Issues of entitlement have also been discussed explicitly in psychoanalytic literature (Grey, 1987; Kriegman, 1983; Solomon & Leven, 1975).

Deservingness has been associated with problems in such diverse areas as personality (e.g., narcissism [Blechner, 1987; Watson & Biderman, 1993; Watson & Morris, 1990]), mood disorders (e.g., depression [Burns, 1980]), criminal deviance (Walters, 1990; White & Walters, 1989), and psychopathy (Hare, 1993). Moreover, Blechner (1987) has suggested that resolving issues of entitlement constitutes the primary determinant of successful outcome in almost all psychotherapy.

The Psychology of Deservingness

Overview. The most comprehensive theoretical formulation of deservingness is found in Melvin Lerner and colleague's notion of "Belief in a Just World". Concern with what is fair and just are central tenants of Just World theory. Lerner (1980) defines the Belief in a Just World as an assumption that we live in a world where people "get what they deserve" (p. 11) and numerous investigations have supported this contention (Damon, 1981; M. J. Lerner, 1981; Reis & Burns, 1982; Smith & Schroeder, 1984). According to Lerner, people behave in ways that reflect, and structure their perception

around, the belief that the world is a manageable, and orderly place - a "Just World" where, by and large, people get what they deserve.

Explicit in the notion of Just World is an understanding of what an individual deserves. Lerner (1980) hypothesized that concern over what is fair (i.e., when one receives what one deserves) develops very early in life (see also Damon, 1981; Dorn, 1988; Simmons, 1981). For instance, it is not uncommon to observe an outraged reaction from a 2-year old who is denied his turn on the slide. But issues of deservingness may arise even earlier than this. For instance, Solomon and Leven (1975) suggest that entitlement issues begin with the reflexive grasp of the infant!

But how does an individual come to understand what s/he deserves in the first place? In explaining the origins of personal deservingness, Lerner (1981) outlined a framework for the development of justice and equity concerns in childhood. In this framework, enlightened self-interest represents the realization that one plays an active role with the inputs and outputs one experiences. For every action there is often a reaction (e.g., reward or punishment). Therefore, a central tenet to enlightened self-interest in childhood is the ability to recognize that outcomes are the end product of a causal process, or in other words that there is a causal link between inputs and outputs. The second critical event in the comprehension of deservingness is the creation of a "Personal Contract" (p. 24). This contract represents the adoption of an assumption that outcomes will be appropriate to the investment or costs (Simmons, 1981). The personal contract represents a functional representation of equity and justice that allows individuals to delay immediate gratification under the assumption that rewards are forthcoming, and also reinforces normatively appropriate views of entitlement (i.e., deservingness is related to relative investments).

Therefore, deservingness derives from the observation and experience of the relationship between inputs and outputs. It occurs in a social learning context, where

direct experience, observation of others, and formal learning can inform the individual's perspective on what one deserves. Because an individual's concept of personal entitlement is based on experience it is not set in an absolute sense. Deservingness is always relative to one's experiences. Some people may believe they deserve more rewards in life, other may believe they deserve less. This suggests the possibility of a continuum of deservingness.

Deservingness Continuum. Within the realm of deservingness concerns, it is possible to conceive of a range of deservingness concerns. Some individuals may have what most would consider normal deservingness concerns. Such people would make deservingness claims based on what "an average" person receives in the same circumstance: "I don't expect to get any more or less than the next person". Other people might be indifferent about what they receive, or what they deserve. Such individuals might be considered to have low, or restricted, deservingness concerns. Finally, there may be individuals who expect to receive the best of what the world has to offer. They desire the most favorable outcomes and thus manifest deservingness claims others would consider excessive or unreasonable.

In fact, these are the types of individual differences in deservingness identified in the literature. In delineating the various aspects of entitlement, Solomon and Leven (1975) described three types of entitlement. First, normal entitlement reflects the idea of not expecting to receive any more, or different treatment, than an average person in the same context. Lerner (1980) wrote that in the absence of specific rules for what one is entitled to, "P deserves what 'others' have who are equivalent to P on some important dimension. P deserves less than those who are more 'entitled,' superior on a relevant dimension, and more than those who are inferior." (p. 11)

Moses and Moses-Hrushovski (1990) stated that "normal" entitlement is difficult to define because deservingness always occurs in a relative context, i.e., making

reference to what others, similar or not, might expect under equivalent circumstances. Similarly, M. J. Lerner (1981) states that Just World beliefs are experienced as objective and compelling but at the same time are not necessarily universal and do vary from person to person. The perception of whether or not a given outcome is fair (i.e., deserved) may vary from one individual to the next. On the whole, individuals with normal deservingness concerns would be more capable than individuals with a more excessive sense of entitlement of accepting variations in positive and negative outcomes.

The second type of deservingness identified in the literature is restricted entitlement (Solomon & Leven, 1975), or as it has subsequently been termed, non (Kriegman, 1983), under (Grey, 1987), or repressed entitlement (Kriegman, 1983; Moses & Moses-Hrushovski, 1990). Such an individual is said to have reduced concerns over what one deserves. This reduction in personal deservingness may reflect an indifference to entitlement or a belief that one's characteristics negate positive deservingness concerns (e.g., "I am not worthy of good things"). A third hypothesis is that the reduction in concern for personal deservingness reflects a transference of personal entitlement concerns to others. Blechner (1987) suggested that non-entitlement may represent an altruistic inclination such that personal deservingness is displaced in order to more effectively attend to the entitlement claims (or needs) of others. In this latter sense, non-entitlement refers to a displaced sense of entitlement such that those entitlement concerns one is aware of are someone else's. These people might be understood as martyrs, saints, or activists - people without personal deservingness because they are more interested in meeting the deservingness needs of others.

Finally, exaggerated (Kriegman, 1983), excessive (Moses & Moses-Hrushovski, 1990; Solomon & Leven, 1975), or over-entitlement (Grey, 1987) refers to the attitude that one is due more than the average. Exaggerated entitlement reflects an attitude of wanting only and always the best outcomes. However, the appraisal that one's

entitlement concerns are exaggerated is more readily apparent to an observer than to the individual him/herself. For in the mind of the individual with exaggerated deservingness, his/her behaviour and beliefs are consistent with what s/he rightly deserves and no more.

In essence, all deservingness, from restricted to exaggerated, would be perceived as normal by the individual in question. Therefore, it is important to be able to distinguish different degrees of entitlement. In general, people are motivated to accept their fate (Apprey, 1988) and reconcile negative outcomes as justified in an effort to preserve the notion of a Just World (Lerner, 1980). Individuals with exaggerated deservingness, on the other hand, would not as readily accept the bad with the good. The attitude of exaggerated deservingness reflects an expectation of receiving only positive outcomes. This translates into a chronic, pervasive, stable belief that one deserves only the best outcomes. Individuals with normal entitlement may understand that things do not always work out as planned. In contrast, the individual high in exaggerated deservingness believes that s/he should *never* have to suffer disagreeable fates. Both individuals with normal entitlement concerns and those with exaggerated concerns may wish for the very best outcomes in all cases, but only the individual with exaggerated deservingness demands such outcomes and may be angered if they do not come to fruition.

An important interpersonal characteristic of exaggerated deservingness is found in a corollary. Deservingness concerns are equivalent to concerns of justice and fairness, i.e., "do I deserve this outcome" is equivalent to "is this fair?" Walster, Walster, and Berschied (1978) have suggested that people adhere to rules of justice, or normal deservingness because, if they did not, their conscience may bother them. Furthermore, people adhere to justice because they do not want to be perceived negatively by observers. This adherence to justice has direct implications for the individual with exaggerated deservingness. First of all, such individuals should be less concerned with

issues of conscience, i.e., more willing to engage in counter-normative behaviours (e.g., lying). Secondly, individuals with exaggerated deservingness would be less concerned with social desirability - they simply do not care what others think of them. If an individual was concerned with his/her self-presentation s/he would not be as likely to manifest exaggerated deservingness. Thus, individuals with exaggerated deservingness should be identifiable through attitudes and behaviours related to interpersonal interactions.

Therefore, the current literature suggests that deservingness can be represented as a range from low, or non-deservingness to high, or excessive deservingness (see Figure 1).

Origins of Exaggerated Deservingness

The focus of the current research pertains to the left hand side of Figure 1: Exaggerated Deservingness (XD). As indicated above, excessive entitlement is likely to elicit negative reactions from observers - e.g., "these individuals are asking for more than they deserve". Such individuals might be perceived as unrealistic, pushy, or demanding. The possibility of distortions in deservingness was also recognized by M. J. Lerner (1981). For instance, during the development of an individual's sense of justice, one might learn that there is no connection between investments and outcomes and therefore conclude s/he should have everything s/he wants. In fact, M. J. Lerner (1981) suggested that people are generally predisposed to exaggerated deservingness. Lerner argued that people are motivated to get all they can and to convince others that they deserve it, an observation supported by Watson et al. (1995). However, Lerner (M. J. Lerner, 1981) also recognized the price of this potentially Machiavellian attitude:

As a result of this common strategy, people recognize that in their work activities and economic exchanges, all are out to maximize their own gain, and to look out for their own private interests. Obviously, though functional in some ways for

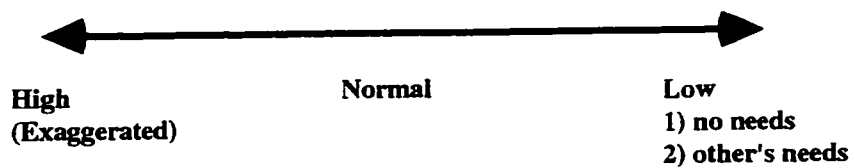


Figure 1. Conceptualization of a continuum of deservingness.

the individual, this strategy for enabling one to avoid violating the sense of what is just and fair leads to a feeling of estrangement, if not distrust, of most other members of the society. (p. 34)

Therefore, most individuals suppress the desire to "get all they can" in the service of better relations with others. However, some people may continue to maximize their own gain, thereby accepting estrangement and distrust of other members of society.

Birth Order. Downes and Rock (1988) suggested that child rearing practices may be partially blamed for the drive to "get all that you can". These authors wrote that American children (and likely North American children) suffer from the "malady of infinite aspiration" (p. 113)... "contemporary American children must be trained to insatiable consumption of impulsive choice and infinite variety" (p. 135). Exaggerated deservingness is intended to capture this emphasis on wanting always and only the best.

Birth order can have a powerful effect on children (Hoffman, 1991). For instance, in a review of the psychological research, Hoffman (1991) concluded that firstborn children, throughout their lives, are treated differently by parents than subsequent children. Furthermore, firstborn, and indeed only children, represent one of the greatest disruptions to a couple's relationship and at each stage of the first child's development the parents are likely inexperienced in childrearing. This disruption is in contrast to the experience of children who have an older sibling. Siblings enter a more experienced family and are perceived differently by the parents.

Moses & Moses-Hrushovski (1990) suggested that first born children are more likely to develop exaggerated deservingness. The authors hypothesize that in families with more than one child, the first born child is in the undesirable position of losing status as the center of attention. This loss of status creates a need or want for regaining that status and can be manifested in exaggerated deservingness. This interpretation is consistent with Moses & Moses-Hrushovski's (1990) assertion that the "wish for

reparation plays an important part in the development and function of entitlement" (p. 62). That is, individuals who feel that they have been slighted in some way may feel that they now deserve special treatment as compensation for suffering.

Alternately, it is possible to conceive of the last born child or only child as a factor in the development of exaggerated deservingness. Eyring III and Sobelman (1996) examined the relationship between narcissism and birth order in a sample of university students. The authors concluded that, although the effects were very small, last born or only children were more likely to score higher on a self-report measure of narcissism. Exaggerated deservingness is a factor incorporated into the narcissism scale that Eyring III and Sobelman used. The authors suggest that evidence of narcissism in only children support a social learning interpretation such that only children experience parental overindulgence and a lack of restrictions and responsibility. Such child-rearing practices might also encourage an exaggerated sense of deservingness.

Compensatory versus Privileged Deservingness. In order to maintain an exaggerated sense of entitlement an individual must believe s/he is deserving. The justification of exaggerated deservingness may stem from either a position of relative inferiority or superiority. Feeling worse off or better than others may encourage an individual to have a distorted sense of deservingness. For instance, if one believes s/he is somehow weaker, sicker, or more long-suffering than others this can lead to the expectation that one is due special treatment. Freud (as cited in Blechner, 1987) recognized this desire for special treatment and described those individuals as having:

renounced enough and suffered enough, and have a claim to be spared any further demands; they will submit no longer to any disagreeable necessity, for they are exceptions and moreover intend to remain so (p. 246)

Thus, some individuals may lay claim to particular treatment as compensation for perceived past injustice.

Compensatory exaggerated deservingness derived from a sense of inferiority may be less immediately obvious than deservingness based on superiority. If one believes her/himself to be stronger, smarter, faster, better looking, more socially skilled, etc., then s/he may expect to receive special consideration, more freedom, better opportunities, and more respect than the *inferior* masses. This idea was explicitly stated by Lerner (1980) in defining normal deservingness: an individual "deserves less than those who are more "entitled," superior on a relevant dimension, and more than those who are inferior" (p. 11). Such ideas are reminiscent of attitudes ascribed to those with Narcissistic Personality Disorder (APA, 1994):

They expect to be catered to and are puzzled or furious when this does not happen. For example, they may assume that they do not have to wait in line and that their priorities are so important that others should defer to them, and then get irritated when others fail to assist. (p. 659)

Uniqueness. An implicit assumption of the belief in compensatory or privileged exaggerated deservingness is that the individual is somehow different than the majority of people. Superiority, in a particular domain, is only justification for special treatment if that superiority represents something different from the majority. If one believed she was intellectually gifted but observed that everyone she came into contact with was also intellectually gifted, her intellectual superiority would not be justification for increased deservingness. Thus, the belief that one is different or unique in some way has been hypothesized as a justification for special treatment (Blechner, 1987; Moses & Moses-Hrushovski, 1990; Solomon & Leven, 1975). By being unique one achieves a special status, a special recognition that might translate into unique entitlement concerns.

Summary. Two potential paths towards the general disposition of XD have been identified in the above discussion. These manifestations of XD are represented in Figure 2.

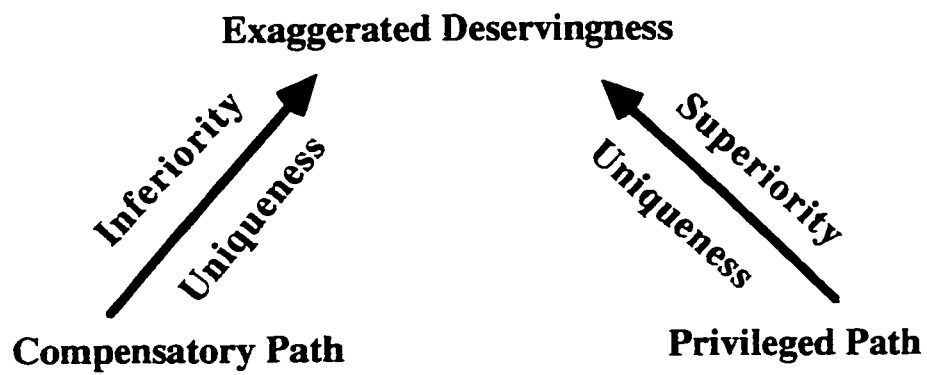


Figure 2. Paths to exaggerated deservingness.

One path to XD is the "Compensatory Path". Entitlement claims within this path are predicated on assumptions of weakness or suffering. The other pathway is the "Privileged Path" wherein entitlement claims are based on the assumption of superiority. These pathways are not intended to be necessary and sufficient, nor mutually exclusive. Simply feeling unique or superior could not completely account for attitudes of exaggerated deservingness. It is quite possible for an individual to feel superior and unique but still not demand different treatment than others. Alternately, an individual may justify claims of special treatment through both privilege and compensation (e.g., I should be allowed to speak first because I am the smartest person [privilege] and last time people did not give me proper recognition [compensation]).

Exaggerated Deservingness (XD): A Scale

No attempt has been made to construct and validate a scale designed to measure exaggerated deservingness. Such a scale could provide a means for evaluating an individual's expectations in regard to social and work situations. Individuals identified with characteristics of XD would be more likely to demand special treatment and consideration, and be more willing to resort to inappropriate methods to obtain expected rewards (e.g., lying). As Blechner (1987) has suggested, knowledge of a client's level of entitlement concern may also have importance for treatment considerations. In fact, any area that involves changes in one's status or issues of personal deservingness could benefit from an empirically validated scale for XD (e.g., divorce and custody proceedings, lawsuits for damages in personal injury cases).

The development of an empirically validated scale for XD would also provide further exploration of the various theoretical correlates of XD. The examination of XD would lead to increased understanding of the development and characteristics of individuals high in XD.

Summary of the Research

In all, three studies provided evidence of the validity of the XD scale. Although the current investigation was not in a position to incorporate the full technique of the multitrait-multimethod matrix (MTMM; Campbell & Fiske, 1959), an attempt was made to examine the construct of XD under the model of multiple methods. The XD scale consisted of a traditional paper-and-pencil measure and was compared with other paper-and-pencil measures, both theoretically related and not. Paper-and-pencil ratings by close friends provided another means of examining the properties of the scale and allowed for questions concerning the observed behaviours of the participants. Other-rated behavioural measures provided an approximation of real behaviours but unfortunately used the same measurement technique: paper-and-pencil. Finally, an experimental task provided a real behavioural correlate to use in the validation of the XD scale.

Study One: Overview

The first study provided the initial psychometric examination of the XD scale by examining a pool of items selected to represent the high end, or exaggerated portion of a normal distribution of deservingness items. Items were considered exaggerated if they reflected more chronic, excessive, demanding attitudes towards entitlement. For example, "Generally, I deserve to have things work out well for me" may not reflect excessive entitlement and thus an exaggerated deservingness item is created by adding a qualifier, "Generally, I deserve to have *all* things work out well for me".

Apart from a standard psychometric evaluation of the suitability of items for inclusion on the final version of the XD scale, the initial study provided evidence of convergent and divergent validity and offered initial evidence for developmental paths to XD.

As discussed above, XD should be associated with particular interpersonal styles and attitudes towards ethical behaviour and self-presentation. These facets are examined

through the use of the Interpersonal Orientation Scale, Machiavellianism Scale, a social desirability scale, and a self-sacrifice scale. Given the hypothesis that individuals with greater XD are more likely to be self-serving in their interactions with others, it is predicted that the XD scale should be negatively correlated with a genuine interest or concern for others, social desirability, and self-sacrifice. An illustration of this insensitivity to others and primary concern for one's own welfare would be found in positive correlations between Machiavellian attitudes and the XD scale.

Exaggerated deservingness claims may be predicated on feelings of uniqueness or superiority. Therefore, the Need for Uniqueness scale and the Superiority scale are expected to correlate positively with the XD scale. The Deferment of Gratification scale is included to gauge the impulsivity and self-control of individuals with XD. It is predicted that the XD scale would be negatively correlated with a measure of the ability to defer gratification. This prediction results from M. J. Lerner's (1981) suggestion that delay of gratification arises during the formulation of the personal contract in childhood. A disruption in the formulation of the personal contract may foster XD and therefore interfere with delay of gratification skills.

As evidence of divergent validity, the XD scale is expected to be uncorrelated with self-esteem. This prediction provides a strong test of the distinctiveness of the XD scale. Self-esteem may be defined in numerous ways but is generally assumed to be a unidimensional, evaluative component of self-concept (Gray-Little, Williams, & Hancock, 1997; Kelln & Ellard, in preparation). As a global, evaluative construct, self-esteem reflects a way of "thinking, feeling, and acting that implies that you accept, trust, and believe in yourself" (Bourne, 1995, p. 299). Such a definition does not imply social comparative processes (i.e., feeling superior to others in order to feel good about self). In fact, some people might argue that if an individual needs to feel superior to others in order to feel good about the self, that is not self-esteem at all (Baumeister, Smart, &

Boden, 1996). However, individuals who score higher on measures of superiority often score higher on measures of global self-esteem (Robbins & Patton, 1985). The relationship between superiority and self-esteem is often attributed to narcissistic-type attitudes (Baumeister, Smart, & Boden, 1996). The XD scale should be positively correlated with superiority due to the use of superiority as justification of increased entitlement. This predicted relationship is consistent with the idea that XD is associated with negative interpersonal behaviours (e.g., lying) and attitudes (e.g., not genuinely caring about others). However, if the XD scale was positively correlated with a measure of global self-esteem it would indicate that the XD scale may be tapping elements of non-exaggerated entitlement, i.e., attitudes of appropriate, assertive deservingness (e.g., people who are just confident in themselves and know what they deserve). It would not be consistent with the conceptualization of XD if an XD scale correlated positively with a good, global measure of self-esteem since feeling good about oneself should not be related to increased entitlement.

Finally, a number of questions were also included in the preliminary psychometric investigation to examine possible origins of exaggerated deservingness. Participants provided information concerning birth order and ratings of their impressions of the nature of upbringing (i.e., did they feel disadvantaged or privileged growing up?) Social learning theory predicts that the only child or youngest child experiences a special status within the family and may come to expect certain privilege (Eyring III & Sobelman, 1996). Alternately, the oldest child, through the loss of status in the family as subsequent children arrive, may be sensitized to issues of personal deservingness and demand compensation for lost privilege (Hoffman, 1991; Moses & Moses-Hrushovski, 1991). With regard to justification for XD attitudes, it is predicted that perceptions of either a disadvantaged or privileged upbringing could lead to increased XD scale scores.

Construction of the Exaggerated Deservingness Scale

The first step in the development of the exaggerated deservingness scale (XDS) involved the generation of potential items. All items were worded in the form of statements. Items were either generated specifically for inclusion on the XDS or were adapted from existing scales measuring related constructs (e.g., narcissism). The initial stage of item generation resulted in a list of 86 items that appeared to adequately reflect the construct of exaggerated deservingness.

The unanalyzed list of items was next presented to a focus group ($N = 6$) of psychology department faculty and graduate students. The focus group examined the items in reference to the following considerations:

- 1) face validity
- 2) clarity of expression
- 3) excessive content overlap with other items

On the basis of this focus group, items were either retained as is, discarded, or modified to more accurately reflect the construct of interest. This process retained a list of 47 items.

Method

Participants

All participants were undergraduate students solicited from the Department of Psychology participant pool. The mean age of the sample ($N = 303$) was 20.05 ($SD = 3.66$) and was comprised of 220 females and 83 males.

A randomly selected sub-sample was invited back to complete only the 47 item XDS a second time approximately two weeks after the first administration ($M = 13.12$, $SD = .90$, range from 11 to 14 days). This second sample ($N = 49$) consisted of 32 females and 17 males and the mean age of the retest group was 19.17 ($SD = 3.56$). Appropriate statistical tests indicated that the retest group did not differ from the rest of

the sample ($n = 254$) on any of the relevant measures (e.g., XD scale or supplementary scales).

Procedure

Participants were run in small groups (4 - 15) over the course of one month. Upon arrival to the session each participant indicated his/her full consent to participate by signing the informed consent. Next, participants received a questionnaire package that included demographic information regarding the participant's age, sex, year in university, number of siblings, and order of birth. Also included in the demographic section were questions concerning the participant's perception of upbringing. Participants responded to the following 6 adjectives describing childhood upbringing: spoiled, unhappy, satisfying, unsatisfying, disadvantaged, and privileged. Participants indicated their agreement with each adjective on a 5-item Likert type scale ranging from 'very true' to 'very false'.

The following scales were also included: 47 item XDS, Deferment of Gratification Scale (Ray & Najman, 1986), Interpersonal Orientation Scale (Swap & Rubin, 1983), Machiavellianism Scale (MACH-IV, see Wrightsman, 1991), Marlowe-Crowne Social Desirability Scale - short form (Fischer & Fick, 1993; Fraboni & Cooper, 1989; Reynolds, 1982; Strahan & Gerbasi, 1979), Need for Uniqueness Scale (Snyder & Fromkin, 1977), Rosenberg Self-Esteem Scale, Self-Sacrifice Scale (Schmidt, Joiner Jr., Young, & Telch, 1995), and the Superiority Scale (Robbins & Patton, 1985).

The 204 items from all scales were randomly distributed in the questionnaire booklet to appear as a continuous series of items. All items were rated on a 5-point Likert type scale labeled as "Strongly Disagree", "Disagree", "Neither Agree Nor Disagree", "Agree", "Strongly Agree". This 5-point response format was recommended by the original author for most of the scales and differed for 3 scales only insofar as a 6- or 7-point scale had been suggested. In order to determine the effect of a response format

other than that suggested for a particular scale, each extant scale's psychometric characteristics (i.e., factor structure, internal consistency) were verified. All responses were recorded on optical scoring sheets.

After completing the questionnaire, participants were asked if it would be acceptable to contact them in approximately two weeks to have them return for the test-retest portion of the study. All participants were willing to be contacted for this second administration thus allowing for a random sample of the initial sample to be collected.

Psychometric Properties of the Exaggerated Deservingness Scale

Item Selection. Items were selected using the following a priori standards (Briggs & Cheek, 1986; Comrey, 1988; Judd, Jessor, & Donovan, 1986):

- 1) item mean of greater than 2 and less than 4 on the 5-point scale
- 2) item-total correlation of greater than .30
- 3) differential reliability index (Jackson, 1970) of greater than .30 where social desirability assessed via the Marlowe-Crowne Social Desirability Scale (short form) was removed

The above criteria were applied to item selection for the entire sample and separately for female and male respondents. Of the initial 47 items, 29 items were retained for the entire sample, 25 items for the female sample, and 31 items for the male sample. Following these analyses, only those items that were retained in all three samples (21 items) were included in the final version of the scale - the Exaggerated Deservingness Scale - 21 Items (XD21; see Table 1).

These procedures resulted in all but 2 of the reverse coded items being rejected from the final version. This was not an unexpected result given that the generation of reverse coded items was found to be quite difficult¹. In the development of a scale that examined attitudes related to exaggerated deservingness, the Selfism Scale, Phares and Erskine (1984) also noted that negatively coded items were difficult to validate

Table 1**Exaggerated Deservingness Scale Factor Loadings for Full, Male, and Female Samples**

Item	Item Wording	Full Sample (N = 303)	Males Only (n = 83)	Females Only (n = 220)
1.	XXX	.62	.78	.50
2.	XXX	.56	.50	.57
3.	XXX	.56	.53	.60
4.	XXX	.55	.49	.57
5.	XXX	.54	.53	.53
6. (r)	XXX	.54	.59	.50
7.	XXX	.54	.58	.52
8.	XXX	.53	.56	.48
9.	XXX	.50	.60	.44
10.	XXX	.49	.54	.51
11.	XXX	.49	.60	.43
12.	XXX	.48	.52	.44
13.	XXX	.47	.51	.43
14.	XXX	.47	.45	.50
15. (r)	XXX	.46	.45	.43
16.	XXX	.46	.61	.36
17.	XXX	.45	.48	.43
18.	XXX	.44	.53	.39
19.	XXX	.43	.46	.39
20.	XXX	.41	.33	.44
21.	XXX	.39	.44	.36

Note. (r) indicates item is reverse coded

actual items have been removed but may be requested from the author

psychometrically for their construct. Therefore, most items on the XD21 reflect positively keyed items that offer less interpretive problems than would a balanced positively and negatively keyed scale.

Distribution of XD21 Scores. Participants' summed scores on the final version of the scale ranged from 28 to 98 and appeared to be normally distributed. A histogram for the XD21 scores appears in Figure 3.

Reliability of the XD21. Estimates of internal consistency show the scale to be highly reliable (Cronbach's alpha = .84). Estimates of internal consistency were similar for males (Cronbach's alpha = .87) and females (Cronbach's alpha = .82). Test-retest correlations conducted after approximately 14 days were .81 for the sub-sample ($n = 49$) and .87 and .73 for males and females, respectively.

Factor Analysis of the XD21. Exploratory principal components factor analysis was used to determine the factor structure of the XD21. Examination of the resulting scree plot strongly suggested the existence of a dominant first factor for XD21 items. This first factor accounted for 24.6% of the common variance with the next factor accounting for only 6.7%. An examination of the factor loadings in a single factor solution supports a unidimensional factor structure (see Table 1). Separate examinations of the male and female samples also supported the unidimensional nature of the scale. The scree plots for the total sample, and the male and female samples are shown in Figure 4.

Measures

Table 2 reports the Cronbach's alphas and results of factor analysis with the other measures reported in Study 1. Examination of the factor structure for each scale was conducted using principal components extraction and varimax rotation. Eigen values and an examination of the scree plot informed the decisions regarding the number of factors retained for each scale. The final composition of each factor minimized redundancy by

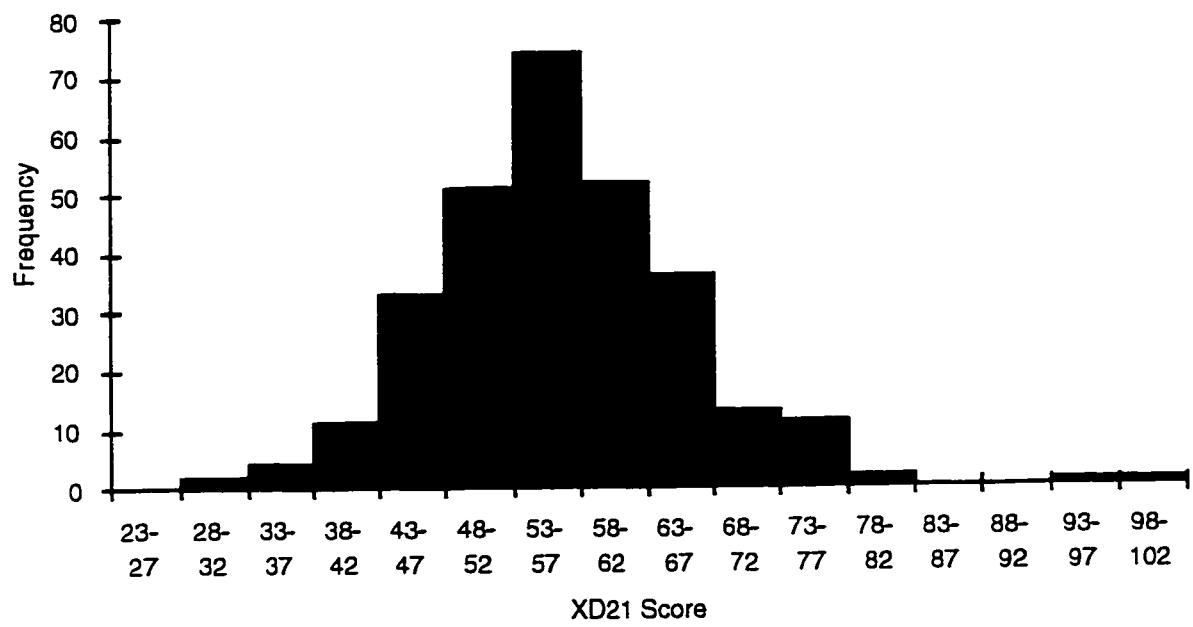


Figure 3. Distribution of XD21 scores ($N = 303$).

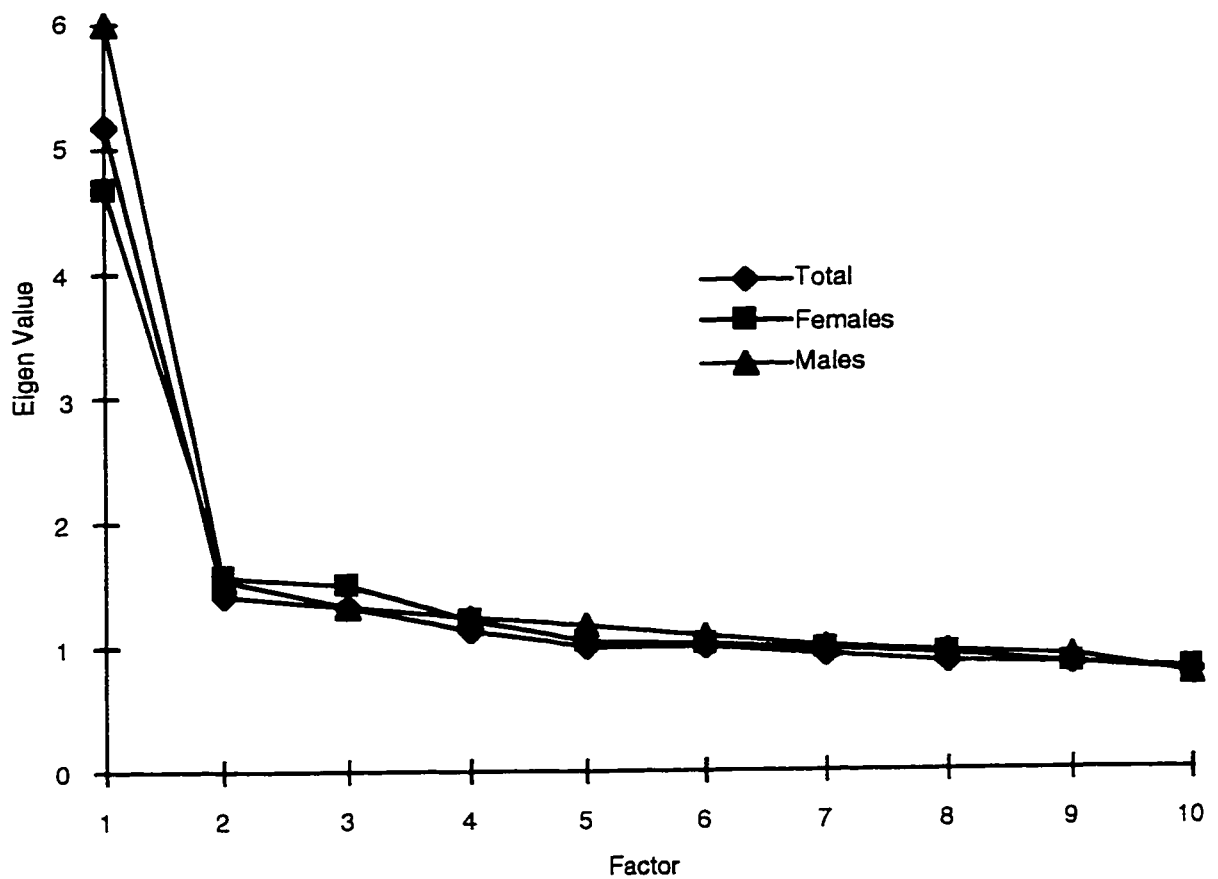


Figure 4. Scree plots of the XD21 factor analysis for total ($N = 303$), male ($n = 83$), and female ($n = 220$) samples.

constructing mutually exclusive factors (i.e., items were loaded on only one factor) by examining item content for loadings in excess of .30. Appendices A.1 through A.8 show the specific factor loadings for each scale. In all cases, the identified factor structure is highly consistent with previous findings regarding the scale of interest. Appendix B.1 contains the complete correlation matrix for all scales and corresponding factors.

Interpersonal Orientation Scale. Swap and Rubin (1983) suggest that the IO scale can be divided into three factors. The first factor represents "reactiveness or responsiveness to those behaviors of others that directly affect the subject" (p. 210). Factor 1 approximates this factor of reactiveness to the actions of other and is characterized by items such as "I am very sensitive to criticism" and "I can be strongly affected by someone smiling or frowning at me". The second factor suggested by Swap and Rubin (1983) represents "an interest in what other people are like" (p. 210). This factor corresponds to Factor 3 in the current factor analytic solution. Factor 3 is characterized by items such as "I often find myself wondering what my professors are really like" and "Sitting on a bus or the LRT, I sometimes imagine what the person sitting next to me is like". Finally, Swap and Rubin (1983) suggest the third factor represents "less homogeneous issues that have stood up under cross-validation but that are not easily characterized by summary labels. This factor is consistent with Factor 2 of the current analysis as the items represent numerous complex issues regarding interaction with others (e.g., "I consider myself a forgiving person" and "When people tell me personal things about themselves, I find myself feeling close to them").

Mach-IV. Various factor analytic solutions have been proposed for the Mach-IV but a three factor solution appears to adequately capture the dimensions of the construct (Wrightsman, 1991). The derived Factor 1 in the present study corresponds to the cynicism factor identified by Hunter, Gerbing, and Boster (1982), or the negativism factor suggested by Wrightsman (1991). This factor is described as a belief that other

people are "untrustworthy, self-serving, and malevolent" (Hunter, Gerbing, & Boster, 1982, p. 1294) and is characterized by items such as "It is safest to assume that all people have a vicious streak and it will come out when they are given a chance". Factor 2 is consistent with the duplicity factor (Wrightsman, 1991), or the deceit factor (Hunter, Gerbing, & Boster, 1982), and is represented by items such as "There is no excuse for lying to someone", and "Honesty is the best policy in all cases" (both items are reverse scored). Finally, factor 3 in the present analysis corresponds to the immorality factor - a belief that people are fundamentally immoral (Hunter, Gerbing, & Boster, 1982), or the distrust of people factor (Wrightsman, 1991). Factor 3 is defined by items such as "Most people are basically good and kind" and "Most people are brave" (both reverse scored). Factor 1 and Factor 3 are differentiated on the basis that factor 1 measures a belief in the negative, self-serving nature of people while factor 3 is a denial of good or decent qualities in people.

Need for Uniqueness. Snyder and Fromkin (1977, 1980) reported a three factor solution for the Need for Uniqueness scale. These factors correspond closely to the factor solution identified in the present analysis. Factor 1 in the present study corresponds to the factor identified by Snyder and Fromkin (1978) as "a willingness to defend . . . beliefs publicly" (p. 84) and is represented by items such as "I speak up in meetings in order to oppose those whom I feel are wrong" and "I tend to express my opinions publicly regardless of what others say". Factor 2 corresponds to Snyder and Fromkin's factor defined as "a person's desire to not always follow rules" (1980, p. 84). Some items that comprise this factor are "It is better to break rules than always conform with an impersonal society" and "I must admit I find it hard to work under strict rules and regulations". The final factor corresponds to Snyder and Fromkin's factor of "a lack of concern regarding other's reactions to one's different ideas, actions, etc." (1980, p. 84). Items that comprise this final factor are "I find that criticism affects my self-esteem" and

Table 2

Cronbach's Alphas and Factor Analysis Results for Existing Scales

Scale	Cronbach's Alpha	Factor Structure	Eigen Value	Percent Common Variance
Deferment of Gratification	.72	unidimensional	3.30	27.5
Interpersonal Orientation	.68	3 factors		
Factor 1	.51		3.68	12.7
Factor 2	.61		2.54	8.7
Factor 3	.65		2.00	6.9
Machiavellianism	.78	3 factors		
Factor 1	.65		4.15	20.8
Factor 2	.72		1.65	8.2
Factor 3	.58		1.49	7.5
Marlowe-Crowne Social Desirability (short form)	.62	unidimensional	2.33	23.3
Need for Uniqueness	.85	3 factors		
Factor 1	.84		6.74	21.1
Factor 2	.68		2.21	6.9
Factor 3	.70		1.74	5.4
Rosenberg Self-Esteem	.88	unidimensional	4.98	49.8
Self-Sacrifice	.79	unidimensional	4.07	23.9
Superiority	.79	unidimensional	3.88	27.7

"Feeling different in a crowd of people makes me feel uncomfortable" (both items reverse scored).

Self-Sacrifice Scale. The Self-Sacrifice scale was developed as part of the Schema Questionnaire (Schmidt et al., 1995) and is principally used in the context of therapy. Therefore, the Self-Sacrifice scale has received limited psychometric examination. However, an examination of the psychological research identified no other scale appropriate for measuring self-sacrifice. The item content on the Self-Sacrifice scale appeared to be appropriate for an examination of the willingness of the respondent to engage in behaviour that benefits others. Factor analysis within the current study suggested that the scale is unidimensional. However, 3 of the 17 items loaded only very weakly onto the main factor. Examination of item-total correlations confirmed that items 7, 9, and 16 should be removed from the final version of the scale. All three items yield item-total correlations and factor loadings less than .20.

Superiority Scale. Robbins & Patton (1985) developed the Superiority Scale as a valid measure of a respondent's feelings that he/she is superior to others. Unfortunately, one item on the scale had content that directly addressed entitlement concerns: Item 2 - "I deserve favors from others". Such an item might affect the interpretability of observed correlations between the XD21 and superiority. Therefore, 5 additional items, that had strong face validity for the construct of superiority, were adapted from the Narcissistic Personality Inventory (Raskin & Terry, 1988) and added to the Superiority Scale. Factor analysis indicated that the Superiority Scale, with the additional 5 items, was a unidimensional scale. Furthermore, both factor analysis (factor loading of only .27) and an examination of item-total correlations ($r = .21$) indicated that item 2 should be removed. The resulting scale is a strong measure of superiority without an overlap in content with the construct of exaggerated deservingness.

Unidimensional Scales. The remaining scales (Deferment of Gratification, Rosenberg Self-Esteem, and Social Desirability) were identified as unidimensional by the original authors. In the current study, a single factor solution for each of these scales supported their unidimensionality. No attempt was made to modify the scales to improve reliability or internal consistency as these scales are supported by previous research.

Results and Discussion

Construct Validity of the XD21

Table 3 contains the correlations between the XD21 and other measures from the study. For purposes of clarity, correlations will be discussed in terms of the strength, or magnitude of the correlation. Using cutoffs suggested in Judd, Smith, & Kidder (1991), a weak correlation corresponds to less than .30, moderate as less than .50 and strong refers to correlations greater than .50.

Convergent Validity. The pattern of relationships between existing scales and the XD21 is highly consistent with predictions regarding construct validity. The XD21 was reliably correlated with Machiavellianism, Need for Uniqueness, and Superiority. These correlations indicate that greater exaggerated deservingness is associated with more Machiavellian attitudes, stronger need for uniqueness, and greater feelings of superiority. An examination of the relationship between the factor components comprising the various scales provides further evidence of the construct validity of the XD21.

With regard to Machiavellianism, a strong correlation was observed between XD21 and the Machiavellian factor of deceitfulness thus indicating that increased XD is related to increased willingness to be dishonest. A moderate correlation between the NFU factor of not always following rules and XD21 supports the view that individuals with higher XD are more willing to violate rules. This positive relationship with not following rules is consistent with the observed correlation between the XD21 and

Table 3Correlations between the XD21 and other measures

Scale	Full Sample (N = 303)	Males Only (n = 83)	Females Only (n = 220)
Deferment of Gratification	-.24**	-.18	-.24**
Interpersonal Orientation	-.05	-.29**	.14*
IO - sensitivity to behaviour of others	.11	-.12	.25**
IO - residual category	-.21**	-.36**	-.05
IO - interest in what others are like	-.06	-.16	.00
Machiavellianism	.48**	.57**	.39**
Mach - negative view of people	.37**	.55**	.23**
Mach - deceitfulness	.52**	.56**	.47**
Mach - rejection of good in people	.19**	.26*	.12
Marlowe-Crowne Social Desirability	-.32**	-.33**	-.31**
Need for Uniqueness	.21**	.17	.18**
NFU - willingness to speak mind	.12*	.10	.09
NFU - desire to not always follow rules	.38**	.38**	.34**
NFU - lack of concern for other's reactions	-.06	-.16	-.05
Self-Sacrifice	-.13*	-.32**	-.04
Superiority	.52**	.58**	.48**
Rosenberg Self-Esteem	-.03	.10	-.11

* = $p < .05$ ** = $p < .01$

Machiavellianism. In other words, increased XD is associated with willingness to engage in counter-normative behaviour.

The conceptualization of individuals high in XD becomes more focused when considering the relationship of the XD21 and the Social Desirability scale and Self-Sacrifice scale. A moderate negative correlation between the XD21 and social desirability indicates that higher XD is associated with decreased concern for positive impression management. Furthermore, a weak, but significant, negative correlation indicates that higher XD21 scores are associated with decreased willingness to engage in self-sacrificing behaviours. These results are entirely consistent with the correlations already noted regarding counter-normative behaviours. Individuals scoring higher on the XD21 are less willing to engage in self-sacrificing behaviours and are instead more accepting of rule-violating behaviours (e.g., lying). Moreover, individuals with higher XD21 scores are less concerned with how they are viewed by others (i.e., decreased social desirability).

Other factors scores on the Machiavellian scale help to explain XD individuals interpersonal attitudes. The XD21 was moderately correlated with the Machiavellian factor of a negative view of people and weakly correlated with the rejection of good in people. Both correlations were in positive directions indicating that higher XD21 scores are associated with more negative views of other people. A related correlation found a strong positive relationship between XD21 scores and the Superiority scale. Taken together, these complementary results indicated the individuals higher in XD have a negative view of others and a view of themselves as superior. These views likely serve as justification for XD individuals' willingness to engage in counter-normative behaviour without caring about the reaction of others. The belief that others are inferior, or unworthy, may also partially account for higher XD21 scores association with a decreased likelihood of engaging in self-sacrificing behaviours.

Finally, the hypothesis that XD21 scores would be associated with a greater need for being unique was supported. The XD21 was weakly correlated with the Need for Uniqueness scale. Also as predicted, the XD21 was significantly negatively correlated with Deferment of Gratification. This weak correlation indicates that higher XD21 scores are associated with a decreased ability to delay gratification and could be interpreted to mean individuals high in XD are prone to be impulsive and do not like to wait to receive what they want.

A non-significant correlation between XD21 scores and the NFU factor score of lack of concern for other's reactions was unexpected. Given the other relationships, it would make sense that individuals higher in XD would not be concerned with how others react towards them but this was not supported on this factor. It is possible that the relationship between XD and interpersonal relationships is more complex than simply caring about other's reactions or not. For instance, if one assumes that individuals with higher XD are motivated to receive all the benefit they can from social interactions then an individual's concern for interpersonal interactions might be instrumental (i.e., they pay attention to social cues and what other's think in order to use that information to their advantage). Measures of interpersonal orientation that do not adequately differentiate between genuine interest in others versus instrumental interest in others may provide conflicting results when compared to the XD21.

Divergent Validity. Discriminant construct validity is found in the examination of the XD21's relationship with the Rosenberg Self-Esteem scale. A significant correlation was not predicted between the XD21 and genuine, global self-esteem and this was verified.

An interesting corollary of the result regarding self-esteem, superiority, and XD should be emphasized. Feelings of superiority correlate moderately with self-esteem and feelings of superiority correlate strongly with the XD21, however, self-esteem and XD21

show virtually no correlation. These results suggest that XD is related to feeling superior to others but not related to genuine positive feelings about oneself (i.e., self-esteem) and thus provides evidence that feelings of superiority and high self-esteem have different consequences even though they may have high intercorrelations.

Sex Differences. No sex differences were specifically predicted for the relationship of the XD21 with other measures. Therefore, all analyses involving sex differences were conducted in order to verify the operating characteristics of the XD21 across sex. It is interesting to note that, while the interpretation of XD21 scores in relation to others scales is appropriate for both males and females, an analysis conducted separately by sex provides slightly different evidence for males than females. For instance, the XD21 is more strongly correlated with Machiavellian attitudes in males than females. Furthermore, the Interpersonal Orientation scale factor score of sensitivity to what others are like was uncorrelated with the XD21 in the male sample but correlated significantly with XD21 in the female sample. In other words, higher XD21 scores in females are associated with increased sensitivity to others. This would suggest that females with greater XD do not necessarily reject the good in other people. This hypothesis is supported in an examination of the Machiavellian factor of rejection of the good in people. For males, this factor is weakly correlated with XD21 scores but the rejection of good in others is not correlated with XD21 in the female sample. Finally, given that higher XD in females may not be related to negative views of others, it is not surprising that the weak negative correlation of the XD21 with the Self-Sacrificing scale is accounted for entirely by a moderate negative correlation in the male sample. For the female sample, the Self-Sacrifice scale is uncorrelated with XD21 scores.

The asymmetry between male and female manifestations of XD is illustrated quite well in the overall scores of the Interpersonal Orientation scale. For males, the XD21 shows a moderate negative correlation with the Interpersonal Orientation scale indicating

that individuals higher in XD are less oriented towards positive interpersonal relationships. Females, on the other hand, show a weak, but positive, correlation with the Interpersonal Orientation scale. Because of this sex specific relationship, the overall correlation of the XD21 with the Interpersonal Orientation scale is virtually .00.

Origins of Exaggerated Deservingness

The hypothesis that higher XD21 scores might be associated with being the eldest child was not supported by the data (see Table 4). The results for the entire sample suggest that the last born and/or the only child is more likely to have higher XD. Using a separate variance estimate given the widely differing sample sizes in each cell, a contrast comparing the first and middle born participants' XD21 scores against the last born and only children was significant ($t(27) = 2.51, p = .018$). Thus, being the youngest or only child may be a precursor to elevated XD.

When the birth order results were examined separately for males and females, different patterns were evident. For females, being an only child resulted in higher XD scores than the combination of all the other groups ($t(13) = 2.93, p = .012$). Unfortunately, the male sample contained fewer respondents and only one participant indicated he was an only child. However, the results for the male sample suggest that the last born child may exhibit greater XD than the other groups combined ($t(33) = 2.81, p = .008$). Together, these results support a social learning interpretation of the development of exaggerated deservingness. An only child or youngest child may come to expect certain privilege given parental overindulgence (Eyring III & Sobelman, 1996). Obviously, the current results do not provide strong support for a social learning explanation and further research is necessary to replicate and expand the findings.

Two pathways were hypothesized for the development of XD. The first represents a "privileged" pathway wherein the individual feels that s/he is superior and deserving of extra reward or benefit and subsequently less hardship. The other pathway

Table 4**XD21 Means and Standard Deviations by Order of Birth and Sex**

	<u>Total</u>			<u>Males</u>			<u>Females</u>		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Order of Birth									
Oldest Child	2.65	.41	133	2.74	.51	33	2.62	.37	100
Middle Child	2.58	.47	58	2.79	.44	23	2.44	.43	35
Youngest Child	2.72	.46	99	2.93	.55	26	2.65	.40	73
Only Child	2.87	.42	13	2.29	--	1	2.92	.40	12

represents the "compensatory" pathway wherein the individual feels s/he has suffered previous hardship and no longer needs to submit to anything disagreeable and should receive extra reward and privilege as recompense. As a first step in examining the relationship of such attitudes to the manifestation of XD, participants were asked to rate their perception of upbringing on a number of items. Of the 6 items that measured perception of privilege or disadvantage in upbringing, 5 items yielded item-total correlations in excess of .50 and were retained. One item concerning a "Spoiled" upbringing was discarded due to a low item-total correlation (.17). The resulting 5-item scale had a coefficient alpha of .83 and appeared to be distributed normally. The overall correlation between perception of upbringing and the XD21 was not significant ($r = -.16$). When correlations were examined separately by sex, a weak negative correlation ($r = -.19, p < .01$) was found in the female sample ($n = 220$). This correlation indicated that females scoring higher on the XD21 were more likely to rate their upbringing as disadvantaged. For the male group ($n = 80$) there appeared to be no relationship between perception of upbringing and XD21 scores ($r = -.04$). Given the weak correlations, there is little support for the role of the perception of childhood upbringing and XD21 scores.

Summary

Overall, the results from this initial psychometric examination are encouraging. The findings suggest many areas of future research. In interpreting the findings, it appears that males and females may demonstrate important differences in the manifestation of XD. It is possible that males with elevated XD21 scores are less interested in other people, consider themselves superior, and are more likely to be the youngest sibling. Females with elevated XD scores may not exhibit the same lack of regard for other people but still show elevated levels of Machiavellian attitudes but not to the extent that it limits their willingness to help others (i.e., the self-sacrifice scale was

uncorrelated with the XD21). Finally, females with greater XD21 scores are more likely to be only children.

Study Two: Overview

The evidence from Study 1 supports the construct of exaggerated deservingness as measured by the XD21. Individuals scoring higher on the XD21 appear to think of themselves as superior and unique, endorse counter-normative behaviour, reject the good in other people, are less susceptible to social desirability pressures, and are unwilling to engage in self-sacrificing behaviours. Given these interpersonal characteristics, XD, especially in those we know well, should be recognizable. Measuring the relationship between self-generated and observer-generated XD21 scores constitutes one of the goals of Study 2. It is predicted that a significant positive correlation will be demonstrated between self-generated and other-generated XD21 scores.

The results of the first study also suggest that individuals with higher XD21 scores do not care about other people and may, therefore, engage in counter-normative behaviours. However, Study 1 relied on factor scores that reflect an individual's attitudes towards various sorts of behaviours (e.g., lying). Therefore, a second goal of Study 2 is the examination of the frequency with which participants engage in specific behaviours that may be considered evidence of XD (e.g., disobeying traffic signals, littering, interrupting). The XD21 should be positively correlated with behaviours representing violations of social (e.g., interrupting people) or legal (e.g., speeding) norms.

Finally, the XD21 was compared to a scale intended to measure equity sensitivity, a construct conceptually related to XD. Recently, Huseman, Hatfield, and Miles (1987) developed the concept of equity sensitivity which is defined as an individuals' desired income-outcome ratio in employment situations. The Equity Sensitivity Instrument (ESI) was developed to measure various aspects of equity sensitivity and low scorers on this instrument are referred to as "Entitleds". The concept of "Entitleds" appears to be

conceptually similar to XD, although in a much narrower context (employment situations), and thus the XD21 should be negatively correlated with the ESI.

Method

Participants

Participants were solicited through the Department of Psychology participant pool. All participants were undergraduate students, who were asked to bring a friend or partner "who knew them well". A total of 56 individuals agreed to participate from which 53 complete pairs of data were collected. Three partners were unable to attend a session and the corresponding participant was eliminated from any analysis concerning pairs. The mean age of all participants was 19.69 ($SD = 3.31$) with 72 females and 37 males. Of the completed pairs, 8 were male/male, 19 were female/female, and 26 mixed. On a 4-point scale from 1 representing no knowledge of the friend/partner to 4 representing "I know my friend/partner very well" the mean score was 3.72 ($SD = 0.49$). Of the completed pairs, 8 rated the relationship as friends, 36 as close friends, 8 as romantic partners, and 1 as relatives (i.e., mother/daughter). The average length of time the pairs knew each other was 57.23 months ($SD = 46.68$, range 3 - 240 months).

Measures

XD21. The 21-item Exaggerated Deservingness scale (XD21) derived from Study 1 was employed. In addition, an observer-rated version of the XD21 was created by modifying the items to correspond to how a participant perceives his/her partner/friend. For example, 'I hate standing in line-ups' would become 'My partner/friend hates standing in line-ups'.

Equity Sensitivity Instrument. The Equity Sensitivity Instrument (ESI) measures individual differences in sensitivity to input and output ratios in employment situations (King Jr., & Miles, 1991) but may be understood better as an indication of an individuals' work orientation towards being rewarded versus more of a concern for

intrinsic motives (e.g., doing a job well, satisfying work relationships) (Miles, Hatfield, & Huseman, 1994). The instrument is a five item forced-choice scale that requires the respondent to divide 10 points among opposing statements. For example,

The hard work I would do should:

- A) Benefit the organization
- B) Benefit me.

The score is determined by the total number of points allocated to the Benevolents' items. Therefore, higher scores indicate more tolerance for unequal input/output ratios and more attention to the task itself, rather than the outcome - a Benevolent orientation (King Jr., Miles, & Day, 1993). Lower scores on the ESI indicate greater concern for what one will receive, more attention towards what benefits the individual will attain - the Entitled orientation. Estimates of internal consistency using alpha coefficients have typically ranged from .79 to .88 (King Jr., & Miles, 1991). An observer-rated version of the ESI was also created that required the participant to consider how they perceive the friend/partner. The current sample obtained acceptable estimates of internal consistency for both the self-rated (alpha coefficient = .90) and observer rated (alpha coefficient = .91) ESI.

Personality Attributes Questionnaire. The Personality Attributes Questionnaire (PAQ) was added to the questionnaire package to distract respondents from the purpose of the study. The PAQ is intended to measure certain aspects of sex roles (Blascovich & Tomaka, 1991) and thus provides items that are consistent with the cover story that the study is examining the ability to recognize general personality traits in your partner or friend.

Behavioural Exemplars of Exaggerated Deservingness (BXD). Through discussion with interested colleagues and examination of behaviours that might represent exaggerated deservingness a list of 19 specific XD behaviours was generated

(e.g., interrupting someone who is speaking). Participants were required to rate the frequency with which they engaged in the behaviours on a 4-point scale ranging from Never to Frequently. Examination of the distribution of scores on each item revealed that one item ("cheated on an exam") had very little variance and was dropped from subsequent analyses.

Exploratory principal components factor analysis employing varimax rotation was used to determine the factor structure of the BXD. The examination of the resulting scree plot suggested a 3-factor solution. This first factor accounted for 17.4% of the common variance and appeared to represent Motor Vehicle XD (MVXD). The second factor accounted for 9.5% of the common variance and represented Interpersonal Intrusiveness XD (IIXD). The third factor accounted for 8.4% of the common variance and represented a Self-Centered XD factor (SCXD). Examination of the observer-rated BXD resulted in a similar solution with the first factor (MVXD) accounting for 22.5% of the common variance and the IIXD, and SCXD factors accounting for 8.3% and 10.5% of the common variance, respectively. The actual items and factor loadings appear in Appendix C.1. Five items had loadings of .30 or higher for the MVXD scale which collectively resulted in an alpha coefficient of .75 for the self-rated version and .83 for the observer rated version. Seven items loaded on the IIXD factors and resulted in an alpha coefficient of .52 for the self-rated version and .50 for the observer rated version. Finally, the SCXD factor contained 6 items and had alpha coefficients of .49 and .60 for the self- and observer-rated versions, respectively.

Procedure

All participants were run by a research assistant posing as the primary investigator. The primary investigator did not run these sessions so as to not arouse suspicion because the participants would see the primary investigator in Study 3. Sessions were conducted in small groups of 3 to 10 participants. Informed consent was

obtained from each participant prior to completing the questionnaires in Study 2. Partners often attended the sessions together but were not required to. All participants were given a questionnaire booklet containing demographic information (i.e., initials of self and partner - for verification, age, type of relationship, length of relationship, and estimate of how well the participant knows the friend/partner), self-rated versions of the XD21, ESI, PAQ, and the BXD, and observer-rated versions of the XD21, ESI, PAQ, and BXD. For half of the participants, the self-rated scales were completed first.

Results and Discussion

Confirmation of XD21 Psychometric Characteristics

The psychometric characteristics of the XD21 scores obtained in Study 2 remained the same as Study 1. Acceptable variability was found on all of the scale items with an internal estimate of consistency (alpha coefficient) of .83 which is virtually identical to the estimate achieved in Study 1. Although Study 2 represents a smaller sample and thus provides a less reliable factor solution, factor analysis of the XD21 with this sample provided further evidence of the unidimensionality of the scale. Using principal components extraction, a large first factor was identified that accounted for 23.3% of the common variance. The next largest factor accounted for only a third of the common variance of the first factor (i.e., 8.4%). Examination of the scree plot also confirmed that the XD21 is best represented by a single factor solution. Figure 5 shows the distribution of XD21 scores obtained for Study 2.

Overall, the psychometric characteristics of the XD21 remain the same when used to rate a friend or partner. The observer-rated XD21 (i.e., XD21-O) resulted in an alpha coefficient of .87. Principal components factor analysis also suggested a unidimensional scale with a large first factor accounting for 28.4% of the common variance. The distribution of observer-rated XD21 scores appears in Figure 6. Therefore, the

psychometric characteristics of the XD21-O support the use of the scale as an independent measure of XD as rated by a friend or partner.

Observer Validity

To determine whether people can identify exaggerated deservingness in people they know well, the correlation between self-rated XD21 and observer-rated XD21 was examined. A moderate correlation ($r = .31, p < .01$) between self and observer rated XD21 scores for the full sample demonstrated that exaggerated deservingness is recognizable in those we know well. Examining this correlation within each specific type of relationship finds a significant positive correlation for close friends ($r = .32, p < .01$) but not for friends or romantic partners. However, the correlation for romantic partners is a strong positive correlation ($r = .51$) and only fails to reach significance due to a small sample size ($n = 16$). Thus, the correlation might indicate that romantic partners can recognize exaggerated deservingness in their partners. People who classified their relationship as "friends" had the lowest correlation ($r = .16$). These differences in correlation sizes do not correspond to differences in the length of time the partners knew each other. A oneway analysis of variance (ANOVA) of the length of time the partners knew each other by the type relationship was not significant ($F(2, 103) = .91, p > .05$). However, the difference in magnitudes of correlations was consistent with significant differences between the groups in how well the dyads rated their knowledge of each other. A oneway ANOVA revealed a significant difference in how well each group knew each other ($F(2, 104) = 32.97, p < .0001$). The romantic group rated their knowledge of each other as an average of 4.00 on a 4 point scale while the close friends category was close behind at 3.82. The friends category rated their knowledge of each other the lowest at 3.06. These ratings of how well the partners knew each other parallel the magnitude of the correlations. Therefore, it was not how long the partners knew each other but how well they knew each other that mattered.

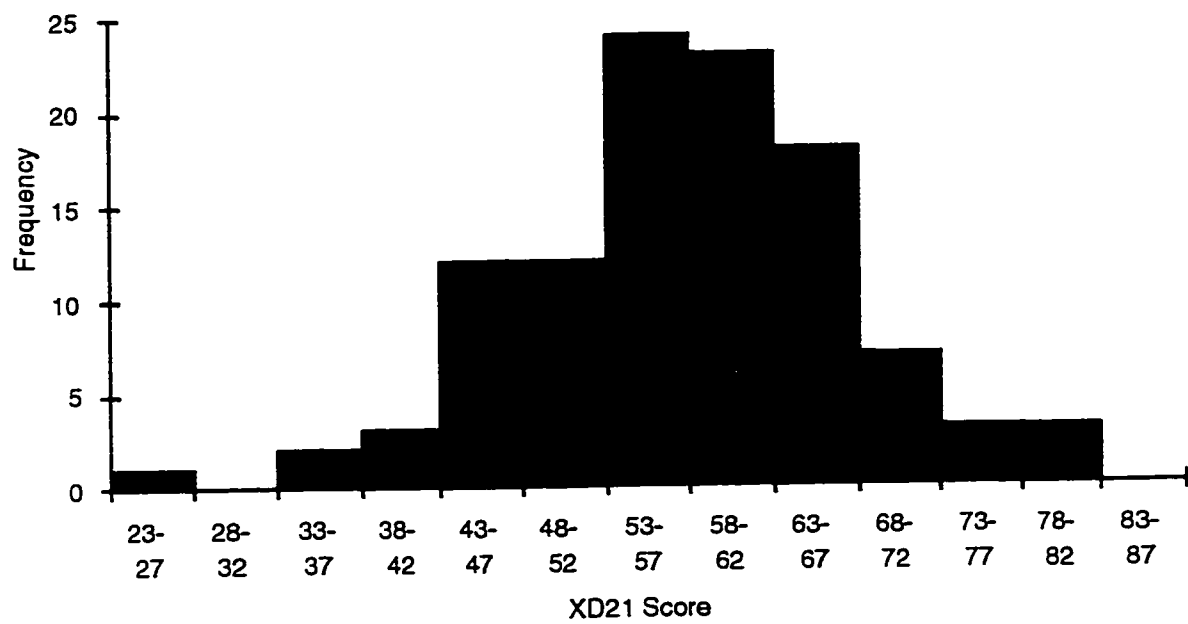


Figure 5. Distribution of self-rated XD21 scores for Study 2 ($N = 109$).

XD21 and Equity Sensitivity

The correlation matrix of the XD21 and XD21-O with the other measures in the study are shown in Table 5. As predicted, higher scores on the XD21 are associated with a less Benevolent and more Entitled perspective on how one desires to be paid in work-related situations. The relationship between XD21 scores and the desire to be overpaid appears to be stronger in males than females.

XD21 and the Frequency of Self and Observer-rated Behaviours

The correlation between self and observer rated scores on both the XD21 and on the 3 factors of the BXD are shown in Table 6. Higher XD21 scores were weakly associated with the admission of greater numbers of motor vehicle (e.g., passing other vehicles in a turn-only lane) and interpersonally intrusive (e.g., interrupting someone who is speaking) XD behaviours but not to self-centeredness. The XD21 ratings by friends/partners were related to a greater perception of interpersonally intrusive behaviours and self-centeredness (e.g., cheating on an exam) but not significantly related to motor vehicle behaviours. It is possible that friends/partners do not have the opportunity to observe the target individual's driving behaviours but would be able to comment on an individual's behaviours that do not require the use of a vehicle. Interestingly, motor vehicle behaviours were the only behaviours that correlated across self and observer ratings. That is, higher observer-rated XD21 scores were significantly correlated with the self-rated frequency of motor vehicle XD behaviours. Similarly, self-rated XD21 scores were significantly correlated with observer-rated scores on the motor vehicle factor.

To explore further the usefulness of the specific behavioural evidence in the manifestation of exaggerated deservingness, all of the individual self-rated behaviours were entered into a stepwise hierarchical regression to predict the self-rated XD21 scores. This analysis demonstrated that 3 specific behaviours predict XD21 scores: "making

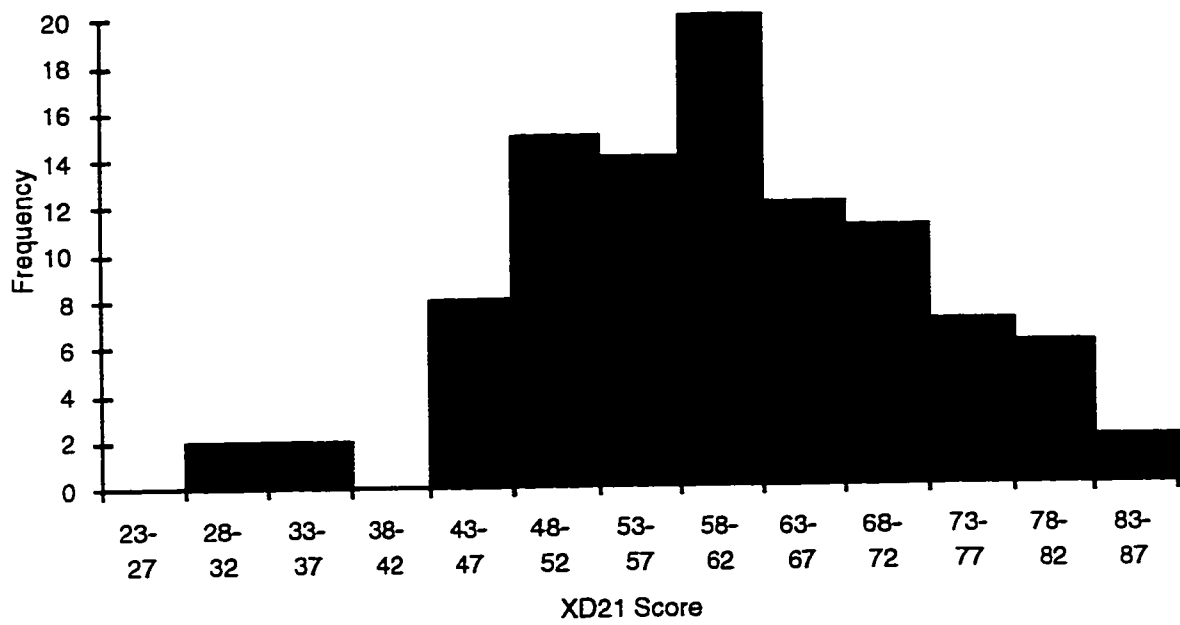


Figure 6. Distribution of other-rated XD21 scores for Study 2 ($N = 109$).

Table 5

Correlations for the Total, Male, and Female Samples of the XD21 and Equity Sensitivity Index both Self and Other Rated Versions

	Full Sample (N = 109)		Males (n = 37)		Females (n = 72)	
	XD21	XD21-O	XD21	XD21-O	XD21	XD21-O
<u>Self-Rated Scales</u>						
Equity Sensitivity Index ^a	-.40**	-.28**	-.56**	-.12	-.32**	-.24*
<u>Other Rated Scales</u>						
Equity Sensitivity Index ^a	-.24*	-.46**	-.03	-.45**	-.30*	-.40**

* = $p < .05$

** = $p < .01$

^a higher scores indicate a more Benevolent attitude towards economic relationships while lower scores indicate a more Entitled attitude

plans with someone and then changing them because something better comes up", "passing other vehicles using a turn-only lane or using a construction lane", and "sending a meal back at a restaurant". The combination of these 3 behaviours resulted in a multiple R of .38 which was significant ($F(3, 98) = 5.66, p < .01$). An identical analysis was conducted with the self-rated XD21 scores and the observer-rated BXD items. The stepwise hierarchical regression resulted in only one behaviour being entered into the equation: "sending a meal back at a restaurant". This one behaviour correlated significantly with XD21 scores ($r = .33, F(1, 49, p < .05$). No other observer-rated behaviour met the minimum criteria for entry into the regression.

The modest findings for the correlational and regression analyses on the behavioural measures suggests some complexity in the linking of specific behaviours to exaggerated deservingness. Obviously, no list can capture all behaviour that might exemplify XD. Therefore, the current findings may be indicative of a failure to capture the most important behaviours. However, it is also possible that the same trait may be manifested differently in different individuals. For instance, two individuals may be high in XD but the first individual displays more interpersonally intrusive behaviours (e.g., asking for large favours from people s/he does not know well) while the second individual may be less interpersonally intrusive and more self-centered in his/her behaviour (e.g., parking in handicapped spaces). Therefore a homogeneous group of individuals high in XD may represent a fairly heterogeneous group when specific behaviours are examined and thus correlational analyses are less likely to find strong effects.

Table 6

Correlation of XD21 with Behavioural Exemplars of Exaggerated Deservingness Factors both Self and Other Rated

	Full Sample (N = 109)	
	XD21	XD21-O
<u>Self-Rated Scales</u>		
Motor Vehicle XD	.22*	.28**
Interpersonally Intrusive XD	.23*	.06
Self-Centeredness	.16	.06
<u>Other Rated Scales</u>		
Motor Vehicle XD	.22*	.19
Interpersonally Intrusive XD	.08	.26**
Self-Centeredness	.07	.27**

* = $p < .05$

** = $p < .01$

Study Three: Overview

The results of Study 2 suggest that XD characteristics are recognizable by other individuals. Furthermore, XD21 scores were reliably correlated with respondents' reports of engaging in counter-normative activities (i.e., motor vehicle infractions [e.g., speeding] and interpersonally intrusive behaviour [e.g., interrupting]). Study 3 provided an opportunity to examine the relationship between XD21 scores and actual behaviour. Participants were invited to participate in a bogus study about hand-eye coordination. Upon completion of this relatively simple task, participants were invited to take "some raffle tickets" on a draw for \$100.00. The number of tickets the participant was allowed to take was specifically left ambiguous. Therefore, it was possible to present participants with information to define "normal deservingness". This information was provided in the form of a list indicating how many tickets previous participants had been taking. In other words, the social comparison basis for the participants' decisions on deservingness could be manipulated.

Exaggerated entitlement has been defined as feeling entitled to only, and always, the best outcomes. Research has shown that individuals will examine the outcomes of others in order to determine their own outcomes (Austin, McGuinn, & Susmilch, 1980; Bazerman, White, & Lowenstein, 1995). Therefore, an individual with XD might, after examining what other's have received, determine that one's own rewards deserve to be equivalent to the highest paid/rewarded predecessor. Normal deservingness concerns reflect a different, more realistic use of information provided in social comparison. Rather than examining predecessors for the highest paid individual, individuals with more normal deservingness concerns likely attend to the average outcome - "what happens to most people under these circumstances?"

In providing participants with a list of how many tickets previous participants have taken there are 2 meaningful measures of what normal deservingness represents.

An immediately observable feature of a small list of numbers would be the most frequently occurring score (i.e., the mode). Participants without exaggerated deservingness concerns should select a number of tickets not significantly different from the mode. However, another meaningful factor on the raffle ticket list would be the statistical mean. The mode takes into consideration what the majority of the participants have received but the mean provides further information regarding all the scores on the list. Therefore, Study 3 generated an index of deservingness based on the number of raffle tickets the participants took by incorporating both the mode and mean of the raffle ticket list observed by the participant. It was predicted that individuals with high XD21 scores would achieve greater scores than individuals low in XD21 on this index. Furthermore, individuals low in XD21 should achieve scores that are not significantly different from zero - thus representing normal deservingness.

Through the use of different raffle tickets lists, 4 experimental conditions were created. Variations in the number of raffle tickets previous participants took changed the social comparison information provided to the participant. Raffle ticket lists that clearly provide a difference between high payment and average payment should provide the strongest correlation between actual behaviour and XD21 scores.

The number of tickets listed on the raffle sheet in the first condition (Control) approximated a situation where prior participants all took the same number of tickets. This condition is least likely to show a relationship between XD21 scores and the number of tickets selected. The experimental context of the Control list does not provide a basis for individuals to engage in XD behaviour because there is no high paid predecessor to identify with. The second list, Disparity, was identical to the first list except that one prior participant took 4 times more tickets than the others. In the Disparity list it was clear that taking more tickets than everyone else was a possibility exercised by at least one participant. Therefore, the Disparity list should yield a significant correlation between the

number of tickets selected and XD21 scores. The third list, High, revealed that virtually all participants had taken a large number of tickets. Two prior participants on the High list took a small number of tickets and thus the disparity evident on this list favours individuals taking less than they deserve. Thus, the experimental context of the High list encouraged most individuals to identify with the larger, highest paid group and only moderate correlations, if any, would be expected with XD21 scores and number of tickets selected. Finally, the last condition, 50/50, employed a list where participants were equally divided in terms of taking a large number of tickets or taking only 1 ticket. The 50/50 list was intended to be the least constraining in terms of demonstrating what prior participants have done and thus should provide the strongest correlation between XD21 scores and the number of tickets selected.

Study 3 also provided information concerning how XD21 scores relate to perceptions of performance. All participants completed a post-test measure that asked for the participants' ratings of the difficulty of the task, their satisfaction with the study, how well they performed, how much of a contribution they made, and the attractiveness of the raffle prize. One hypothesis is that XD21 scores should be related to a perception of greater performance and greater contribution. Superior performance or contribution would be an obvious means by which an XD individual could justify taking greater numbers of raffle tickets. Furthermore, the measure of the attractiveness of the prize can be used to determine how much variance in the number of tickets taken is accounted for simply by the relative desirability of the prize.

Method

Participants

Participants from Study 2 were solicited for participation in Study 3. Participants were either contacted by phone following Study 2 or booked themselves for Study 3 as they exited Study 2. A final sample of 65 participants was recruited with a mean age of

19.64 ($SD = 3.52$; 49 females and 16 males). On average, 6.90 days ($SD = 3.80$, range 0 to 19) elapsed between Study 2 and Study 3. No significant differences in age, year in university, or scores on any of the relevant measures (i.e., XD21, ESI, BXD) existed between those completing Study 3 and those who did not ($n = 44$).

Materials

Motor-Coordination Task. The ostensible experimental task involved the placement of approximately 50 coloured pieces of varying sizes onto a wooden board containing 16 depressed circles. Participants were required to use only one hand to place all of the coloured pieces onto the appropriate spots on the board. On average, the task took approximately 200 seconds/per hand to complete.

Music. A recording of classical music and a recording of dance music were used as the ostensible experimental variable.

Stopwatch. A standard, digital stopwatch was used that made an audible tone when it was started and stopped in order to impress upon the participant that they were being timed.

Raffle Tickets, Draw Box, and Raffle Sheet. The raffle tickets were selected to be as convenient as possible for the participant. The tickets came in perforated pairs and participants were required to keep one half of each ticket and deposit the other half into a small, locked draw box that was clearly marked ("RAFFLE DRAW BOX"). Each participant indicated the number of tickets selected by writing a number on a sheet that contained columns, ostensibly for participants to record the number of tickets selected. In actuality, these lists were constructed in advance so that each list showed the number of tickets taken by 8 previous participants as indicated by hand-written numbers on the sheet. Table 7 shows the numbers that appeared on the list in each condition.

Procedure

The primary investigator ran all participants individually. The sessions took approximately 30 minutes from the start of the motor-coordination task until the end of the experimental debriefing.

Participants were solicited for a study examining the effect of music on simple motor-coordination. At the time of their solicitation, participants were informed that they would be given the opportunity to win \$100.00 in a raffle.

Upon arrival at the experimenter's office, participants were informed that the study was examining the effect of music on performance and that the motor-coordination task selected was an analogy of assembly line work. At this time, the participant was shown the experimental task. The task would be performed by the participant 3 times, twice with the dominant hand and once with the non-dominant hand. Music would be played on 2 of the 3 trials. The ostensible experiment was constructed so as to be simple, straightforward, and plausible as a psychological investigation. Participants were told that all participants would complete the same task.

Next, participants read and signed the "consent form" for the motor-coordination task. Then they completed a "pre-test" questionnaire that asked for the participant's age, handedness, year in university, and whether there were in any medical conditions that might impair performance on a motor-coordination task. In actuality, no information from the "pre-test" was necessary because all pertinent demographic information was obtained from Study 2.

Next, the participant completed the 3 trials of the motor-coordination task. All participants completed an identical motor-coordination task. In the event any participant inquired about the speed of his/her trials or performance relative to other times s/he was told: "Everyone does about the same."

At the "completion" of the motor-coordination study, the experimenter said:

"That's it. You're done. Thank you for participating. There is a raffle for the participants for \$100.00. The raffle tickets and draw box are right beside this room in the corridor. There is also a sheet there where people indicate how many tickets they are taking. You can go and get some tickets now."

At this point, the participant left the room and entered into an adjacent corridor where the raffle tickets, draw box, and raffle sign-up sheet were located. Each participant found an identical set-up in the corridor. A stack of 50 raffle tickets, the locked raffle ticket draw box, and clipboard with a list of 8 numbers on it representing the number of tickets the last 8 participants had taken. The sign-up sheet also contained the following instructions:

Please indicate the number of raffle tickets selected. This is to keep track of the number of tickets in circulation and you do not need to put your name on this sheet. Please keep the half of the coupon that says: "KEEP THIS COUPON" and deposit the other half into the "RAFFLE TICKET DRAW BOX". The winning number will be posted in APRIL/97.

While the participant decided how many tickets to take, the experimenter stayed in the laboratory and reset the motor-coordination board. Therefore, the participants made their decision regarding how many tickets to take without the investigator being present. The corridor was also located in a locked hallway and was secluded from view by other individuals.

When the participant returned from the raffle ticket corridor, the experimenter pretended to have forgotten to administer the "post-test survey" and asked the participant to complete it then. Apart from filler items designed to support the motor-coordination cover story, the participant was asked to rate, on 7-point scales, the difficulty of the task, their satisfaction with the study, how well they performed, and how much of contribution they made. Finally, participants rated the attractiveness of the \$100.00 prize.

Table 7**Raffle Lists and Selected Statistics for Numbers of Raffle Tickets Taken and XD21****Scores**

	Control	Disparity	High	50/50
Number of Tickets	1	1	8	8
Taken by Bogus	1	1	8	1
Prior Participants	2	8	1	10
	1	1	6	8
	2	2	1	1
	1	1	10	1
	1	1	8	6
	1	1	8	1
n	16	16	16	17
# of Tickets Selected				
<u>M</u>	1.63	3.38	6.19	4.06
<u>SD</u>	.50	3.88	4.02	3.38
Mode	2	1	1,8	1
Minimum	1	1	1	1
Maximum	2	15	14	10
High XD21 ¹ (n)	1.00 (1)	3.00 (1)	6.00 (2)	6.00 (5)
Mid XD21 (n)	1.67 (12)	3.40 (15)	6.50 (12)	4.50 (6)
Low XD21 ¹ (n)	1.67 (3)	--	4.50 (2)	2.00 (6)
XD21 Scores				
XD21 <u>M</u>	56.4	58.31	57.69	54.06
XD21 <u>SD</u>	7.95	7.32	9.27	13.89
Range	30	32	37	46

¹ on the basis of a combined sample of participants from Study 1 and Study 2 (N = 413) cut-offs for XD21 scale were established at one standard deviation above the mean for the High XD21 group ($M > 65.52$) and one standard deviation below the mean for the Low XD21 group ($M < 46.68$)

Once the participant completed the post-test, s/he was finished all of the dependent measures and the experimenter proceeded to conduct a suspiciousness check. General questions and comments were solicited regarding the study. Participants were probed for their thoughts regarding any possible relationship between the motor-coordination study and the personality study they completed earlier (i.e., Study 2). Finally, participants were asked for their impressions of the raffle tickets and how they made their decision on how many tickets to take. No participant expressed suspiciousness regarding the ostensible motor-coordination task, nor did any participant believe that Study 3 was connected to the previous study they had completed (i.e., Study 2). Although some participants indicated that they thought it was unusual that they were allowed to take more than one raffle ticket, no participant was suspicious about the raffle itself, nor about the relationship of the raffle to the other components of the bogus study.

Participants were then thoroughly debriefed, allowed to read and sign the real consent form, signed up for the real raffle, and sworn to secrecy regarding the experimental manipulations they had learned about. All participants expressed interest in the true nature of the study and were impressed with the experimental design as was evidenced by a unanimous request by participants to receive an electronic summary of the results of the study.

Results and Discussion

Equivalence of Raffle List Conditions

Four raffle tickets lists served as the independent variable. No significant differences were observed between the groups (as denoted by the raffle ticket list) for the ratings of how satisfying the task was, how difficult the task was, how great a contribution the participant made to the research, how well the participant did relative to others, nor for the rating of how attractive the prize money was. The conditions also did

not differ by XD21, XD21-O scores, or the length of time that elapsed between participation in Study 2 and participation in Study 3.

Table 7 contains the condition by condition results for the number of tickets selected and information on XD21 scores. The groups did differ significantly ($F(3,61) = 5.31, p < .01$) in the number of raffle tickets selected.

Raffle Ticket Index of Deservingness

The raffle ticket lists presented to participants in the 4 experimental conditions varied the social comparison information provided to the participants. Therefore, participants in different conditions made decisions on how many raffle tickets to take based on different 'baserate' information. By creating a Raffle Ticket Index of Deservingness (RTID), scores across the various conditions can be equated. One assumption of the derived score was that normal deservingness responses would strongly related to the mode of the presented list. The mode represents the most obvious, reoccurring value that previous participants received and is somewhat equivalent to a psychological average. For example, if a participant looked at a raffle ticket list and saw that most other participants had taken one ticket and therefore decided to take one ticket this should not be considered XD. Therefore, the modal score on each list can be subtracted from the participants' scores on that list. However, this index (score - mode) fails to consider the effect of the numbers, other than the mode, on the raffle ticket list. Thus it is necessary to weight the score by the mean of the list. In other words, taking 2 tickets on the Control list should be considered evidence of greater XD than taking 2 tickets on the Disparity list (i.e., 2 tickets is the most tickets anyone took on the Control list while the Disparity list shows one individual who took 8 tickets). The final transformed ticket score is represented by:

$$\frac{(\text{score}_x - \text{mode}_x) * 10}{M_x}$$

$$M_x$$

where $score_x$ represents the number of tickets participant X took, $Mode_x$ is the modal number of tickets on the list presented to participant X, and M_x represents the mean of the tickets presented on participant X's list. This index, the RTID, ranges from negative to positive numbers with zero representing normal deservingness and positive numbers representing deviations from normal deservingness towards exaggerated deservingness. Negative numbers on the RTID would represent deviations from deservingness in a negative direction, i.e., taking less than you deserve.

Number of Raffle Tickets Selected

High and low scores on the XD21 were determined by establishing cut-offs one standard deviation above or below the mean XD21 score based on an aggregate sample of participants from Study 1 and Study 2 ($N = 413$). Creating a trichotomy allowed for increased interpretative power in the present analysis. Although keeping the XD21 as a continuous measure preserves statistical power, it might obscure relationships with the data that are non-linear. Furthermore, a trichotomy, based on a priori cut-offs, provides information concerning the distribution of high and low scoring individuals on the XD21 on a condition by condition basis.

For those participants who scored above one standard deviation on the XD21 ($n = 9$) the mean RTID was 6.57 ($SD = 9.18$). Individuals scoring less than one standard deviation below the mean ($n = 11$) achieved a mean RTID of 1.65 ($SD = 5.31$). Although the high XD group was predicted to yield greater scores than the low XD group, a statistical test, using a separate variance estimate, failed to reach significance ($t(12) = 1.42, p = .09$). Small sample sizes and large variances likely attributed to the failure of this predicted difference. Overall, the trend of this analysis is consistent with the prediction that people scoring high on the XD21 will take more tickets than those who have scored low on the XD21. As predicted, the low XD21 group obtained a RTID not significantly different from zero ($t(10) = .31, p > .10$).

Table 8

Condition by Condition Correlations for Post-test Measures and XD21 scores with the Number of Raffle Tickets Selected

	Control	Disparity	High	50/50
XD21	-.17	.02	-.23	.54*
XD21-0	-.08	.30	.11	.68**
Attractiveness of the prize ¹	.04	.29	.29	.39
How satisfying was the study ¹	-.36	-.03	.53*	-.14
How well did you do on the study ¹	-.28	-.04	.15	.38
How much of a contribution did you make ¹	-.18	.08	.18	-.05
How difficult was the study ²	-.10	.21	.27	-.04

* = $p < .05$

** = $p < .01$

1 higher scores indicated more attractive prize, more satisfying, more well done, or greater contribution

2 higher scores indicate less difficult

Relationship Between Number of Tickets Selected and XD21. The correlation matrix of the relationship between XD21 scores, the number of tickets selected and post-test measures are shown in Table 8. As expected, XD21 scores were not correlated with the number of tickets selected in the Control condition. Exaggerated Deservingness (21 Item) scores were not correlated with the number of tickets selected for the Disparity condition either. The failure to find a significant correlation is in contrast to the prediction. No reliable correlation was observed for XD21 scores and the number of raffle tickets selected in the High condition. These results for the Control, Disparity, and High conditions are consistent for both the self-rated and observer-rated XD21 scores.

The results of 50/50 condition did support the hypothesis of a relationship between XD21 scores and the number of tickets selected. Strong correlations were observed between the number of tickets a participants took and both self-rated and observer-rated XD21 scores. Given the success of the 50/50 condition it is unlikely that restricted sample size could completely account for a non-significant correlation in the Disparity condition.

The discovery of significant correlations in only the 50/50 condition and not in the Disparity condition may illustrate the effects of situational constraints on behaviour. Mischel (1993) suggested that behaviour is determined by multiple factors both in the environment and in the person. Fiske and Taylor (1991) further state that:

A person exists within a psychological field that is a *configuration of forces*. One must understand all the psychological forces operating on the person in any given situation in order to predict anything. (p. 5, italics in original)

One factor contributing to behavior is the person in the situation. The environmental context should not be overlooked when considering any behavior. Behavior has the potential to change as the situation changes. Furthermore, as a situation becomes more

structured and the demands on the person less ambiguous, behaviour is more constrained, i.e., less affected by individual differences and more dependent on the situation.

Conditions 1 to 3 represent more highly constrained situations than does Condition 4. In each case for lists 1 to 3, at least 75% (or more) of the prior participants took basically the same number of tickets. Therefore, the situational cue for the number of tickets a participant should take is highly constraining and would suppress the effect of individual differences in participants. This argument only holds if a less situationally constrained condition yields different results. Condition 4 used a list where the situational constraints were ambiguous - 50% of prior participants took a small amount of tickets and 50% of prior participants took a larger amount. Therefore, the situational demands of the list in Condition 4 should encourage individual differences to play a larger role. Condition 4 resulted in a strong, significant positive correlation between XD21 and the number of tickets selected. The observer-rated XD21 scores are even stronger for Condition 4.

The results of Study 3 are consistent with an explanation that situational constraints can suppress individual difference variance in the prediction of behaviour. But when those restraints are removed, higher XD21 scores are associated with taking a greater number of tickets. Interestingly, the correlation between a friend/partner's rating of the target individual's XD21 demonstrates an even stronger relationship to the target individual's behaviour. Perhaps, XD that is identified by a close friend or partner provides a better assessment and thus makes for a better predictor of behaviour.

The strength of the relationship between the XD21 scale, self- or observer-rated, and the number of raffle tickets the participant selected is even more striking when you consider that the participants' ratings of the attractiveness of the raffle prize were not as good at predicting the number of tickets selected in group 4. Therefore, the relationship

between XD21 and the selection of raffle tickets represents more than simply a desire to win the prize. Furthermore, the measure of the attractiveness of the prize was obtained immediately after the participant selected his/her raffle tickets. Obtaining the attractiveness ratings immediately after the raffle ticket measure should give the ratings more of an advantage in a correlational analysis because the XD21 measure was obtained an average of 7 days before (i.e., XD21 and XD21-O scores were obtained in Study 2)! In other words, the XD21 scale was at more of a disadvantage because the scores were obtained in advance whereas a rating of the attractiveness of the raffle prize occurred at the same time as the decision on how many tickets to take.

An alternate explanation of the failure to find a significant correlation in the Disparity condition derives from an examination of the frequency of high and low XD21 scoring participants within each condition. Table 7 displays the results for participants scoring high on the XD21 and participants scoring low on the XD21. An examination of the distribution of high and low XD21 participants in the various conditions suggests a failure of random assignment. Eleven of 17 participants in the 50/50 condition fell into either the high or low XD21 categories. Only 9 participants yielded either a low or high XD21 score in all of the other conditions combined. For instance, a correlation between XD21 scores and the number of tickets selected was predicted for the Disparity group. Only 1 participant in the Disparity group could be classified as high XD and no participant in that condition had XD21 scores in the low range. Therefore, it is possible that the failure to find a relationship between XD21 scores and the number of raffle tickets selected can be accounted for by an inadequate range of XD21 scores within the Disparity condition rather than a failure to support the predicted relationship.

Participants' Perception of Performance

To determine the relationship between post-hoc measures of reactions to the bogus study and XD21 scores, the correlations between XD21 scores and the post-test

Table 9**Correlation Matrix of Post-Measures and XD21 Scores (N = 65)**

Scale or Item	1	2	3	4	5	6
1) XD21-Self	--					
2) XD21-Other	.37**	--				
3) Attractiveness of prize ¹	.14	.13	--			
4) How satisfying was the study ¹	-.02	.13	.11	--		
5) How well did you do ¹	.39**	.36**	.13	.22	--	
6) How much of a contribution did you make ¹	.17	.17	.29*	.26*	.11	--
7) How difficult was study ²	.14	.10	.08	.02	.25*	.19

* = $p < .05$

** = $p < .01$

1 higher scores indicated more attractive prize, more satisfying, or greater contribution

2 higher scores indicate less difficult

measures were computed (Table 9). A moderate positive correlation indicated that higher XD21 scores were associated with higher ratings of how well the individual believed s/he performed on the task. In contrast, no significant correlation between XD21 scores and the measures of the attractiveness of the prize, the difficulty of the task, or how satisfying the task was were found. However, it was also predicted that a significant positive correlation would be found between the participants' rating of how great a contribution they made to the study and their XD21 scores, but no significant correlation was discovered.

General Discussion

Overall, the results of the current research support the construction of the XD21 as a self-report measure of exaggerated deservingness. The scale demonstrated acceptable psychometric characteristics as a unidimensional, normally distributed, internally consistent, and stable measure of exaggerated deservingness. The XD21 yielded meaningful correlations with measures of Machiavellianism, superiority, social desirability, delay of gratification, and uniqueness and was not correlated with a global measure of self-esteem. The XD21 correlated positively with an admission of engaging in behaviours that could be considered interpersonally intrusive (e.g., interrupting someone who was speaking) or the willingness to engage in motor vehicle infractions (e.g., speeding). Finally, some preliminary evidence suggests that, under certain circumstances, the XD21 might be useful in predicting actual behaviour where an individual has the opportunity to reward him/herself.

XD21 Profiles

The general profile generated through the consideration of the findings suggests that individuals higher in XD are less concerned about how they present themselves, unable (unwilling?) to delay gratification, and more willing to engage in counter-normative behaviours. Individuals with greater XD may see themselves as superior to

others and feel a need to be unique. In contrast to how they view themselves, XD individuals view others negatively, as untrustworthy and lacking in good qualities. Finally, XD can be recognized by others, and observers view individuals high in XD as engaging in more intrusive and self-centered behaviours.

Sex Differences. The results of Study 1 suggested that XD is manifested in slightly different ways, dependent upon the sex of the respondent. In general, males with higher XD21 scores may have stronger antisocial attitudes. For instance, males produced a negative correlation between XD21 scores and a measure of interest towards, and reactivity to, others (i.e., interpersonal orientation). Females, on the other hand, yielded a significant positive correlation between XD21 and interpersonal orientation. Furthermore, males scoring higher on the XD21 are unlikely to engage in self-sacrificing behaviour, a relationship that does not hold for females.

These sex differences are consistent with the literature on personality differences in gender². In an extensive meta-analysis of gender differences in personality, Feingold (1994) reported that males score higher than females on instrumental traits while females score higher than males on expressive traits. Specifically, males have higher self-esteem and are more assertive than females. Females score higher than males on measures of tender-mindedness (nurturance), and trust. These results are consistent across generations, age, education level, and nationality.

The results of Feingold's (1994) meta-analysis support the findings of the sex differences on the XD21. Feingold reported that males score higher than females on measures of self-esteem. The diversity of self-esteem measures that Feingold (1994) included in his meta-analysis suggest that it is possible the results reflect not only unidimensional, global self-esteem but other components as well. One component that has been found within traditional self-esteem measures, such as those included in Feingold's meta-analysis, is social comparison based evaluations (Kelln & Ellard, in

preparation). Therefore, the self-esteem sex difference may partially reflect differences in perceptions of superiority. Combined with the finding that males are more instrumental and assertive, higher self-esteem/superiority in males supports the antisocial view of XD males. Males with higher XD21 scores may believe they are better than others, either because other people are not as admirable or because of personal superiority, and therefore have little interest or regard in others.

Research on females suggest that, in general, they are more nurturing and trusting of others (Feingold, 1994). In the current research, females with higher XD21 scores were not found to reject the good in others nor to view others negatively. Furthermore, higher XD21 scores in females do not discourage female's willingness to engage in self-sacrificing behaviours. Together, these results suggest that the female manifestation of XD may be less damaging to interpersonal attitudes than male XD.

Exaggerated Deservingness: Disorder or Personality Variable?

The description of XD that results from the current series of studies does not necessarily evoke images of health and well-being. Exaggerated deservingness does not seem to reflect a healthy understanding of personal entitlement and a normal desire to get what one deserves. In addition, there is a self-centeredness and urgency about having one's deservingness concerns satisfied that may obscure any need for positive relationships with others (especially in males). Unfortunately, the current research was not in a position to address the actual quality of relationships experienced by those with high XD21 scores. The idea that high XD would lead to difficulties in relationships was argued by Lerner (1980) who argued that individuals who always attempt to maximize their own gain would likely alienate themselves from society.

The Axis II, or personality disorders, of the diagnostic system (DSM-IV) employed by the American Psychiatric Association (APA, 1994) presents disorders in a discrete, or syndromal fashion. A list of related features describes each personality

disorder and individuals are diagnosed if they possess a certain number of these traits (e.g., 5 of 9 traits is the cutoff for Narcissistic Personality Disorder). The APA (1994) also acknowledges the general move of psychology/psychiatry away from the categorical approach of personality disorders and towards a more dimensional system. Exaggerated deservingness, as a dimension, is relevant to many of the current categories of personality disorders. Narcissistic personality disorder lists XD specifically in its criteria: "unreasonable expectations of especially favorable treatment or automatic compliance with his or her expectations" (APA, 1994, p. 661). However, XD can also be considered a factor in Histrionic, Borderline, and Anti-Social personality disorders. In general, the XD21 could be used to examine the relationship of XD to other characteristics within the constellation of traits that comprise a personality disorder, or, XD could be studied independently as an important personality variable.

However, it is not the intention of the current paper to present a strong case for XD as a pathological characteristic. Although it is true that individuals higher in XD may have problems with interpersonal relationships, there is no necessity to ascribe only negative characteristics to XD. For instance, in a materialistic sense, high XD may provide the motivational basis for achievement, pushing the individual to greater degrees of success.

As with any construct that lies on a continuum, the extreme end of the continuum may be unhealthy but less extreme manifestations of XD may be less so. Alternately, high XD may be necessary but not sufficient to create certain types of personality disorders. Perhaps the combination of high XD and impulsivity leads to pathology (e.g., Anti-Social personality disorder) or high XD and a grandiose sense of self (e.g., Narcissism). Further research will need to explore the issue of pathology in XD.

Exaggerated Deservingness: Dispositional versus Situational Variance

Behaviour has the potential to change as the situation changes. Research on XD should consider individual differences in XD, differences in XD as a function of situational variance, and finally, the interaction of individual differences and situational variance in the ultimate manifestation of the construct.

It is possible to understand XD as both a dispositional and situational phenomenon. An individual's general propensity towards either high or low claims of entitlement may be best understood as an individual difference - a continuum along which an individual can be located. However, specific manifestations of deservingness may be affected by situational factors. In some situations, an individual may manifest lowered levels of XD such that s/he is indistinguishable from non-XD individuals. Alternately, the situation may encourage elevated levels of XD that would not normally be as extreme. Aronson (1988) has proposed that "some situational variables can move a great proportion of us "normal" adults to behave in very unappetizing ways" (p. 10).

An example of a very robust psychological phenomenon, egocentric bias (Burger & Rodman, 1983; Greenberg, 1983; O'Malley & Becker, 1984), illustrates an analogy of situational XD. Egocentric bias refers to the phenomenon of self-focused attention and the willingness to be overrewarded: "self-interest corrupts the sense of justice of those who are overrewarded and antagonizes those who are underrewarded" (O'Malley & Becker, 1984, p. 235). Thus, experimental conditions that invoke egocentric bias may be providing an example of XD wherein an individual is drawn to the most favourable outcome distribution.

If XD is conceptualized as both a dispositional and situational variable, every individual could be described as manifesting some general level of deservingness that is further affected by situational variability. What may be most important is the identification of XD that occurs in multiple settings versus XD within very limited

settings. Often, diagnostic criteria recognizes that maladaptive traits may be manifested only in certain circumstances and therefore include multiple settings in the criteria. For instance, a diagnosis of Attention Deficit Hyperactivity Disorder (APA, 1994) requires that the behaviors be manifested in at least two settings (e.g., school and home).

Limitations of Current Research

All of the results from these investigations are based on a University undergraduate sample and as such continued validation with other populations would be desirable. Furthermore, the average age of respondents across the three studies was 19.96 years of age ($SD = 3.57$) and an examination of XD21 scores in a sample of respondents with a greater age range would bolster the confidence of the current findings.

Because the majority of participants were undergraduates in the early stages of their university careers they may experience the university as new and therefore be unsure of themselves and cautious in their approach to new situations. It is unclear how such a perspective might influence the results of the current investigation but it would be desirable to replicate the results on different populations to insure the stability of the findings. For instance, the fact that all of the participants are attending university may indicate a higher degree of delay of gratification skills given the nature of the investment in education. Therefore, the weak correlation noted between the XD21 and the Deferment of Gratification scale may have been partially influenced by the sample selected.

Suggestions for Future Study

Populations. The XD21 will be useful in research exploring issues around deservingness, especially exaggerated deservingness. Accounting for variance associated with XD might be particularly useful in research that examines groups experiencing changes in social status. For instance, divorce proceedings often involve issues around entitlement where joint property and children are concerned. Accounting for an individual's level of exaggerated entitlement might be useful in predicting how such

custody proceedings would progress. For instance, does a parental claim to the children reflect a genuine desire to rear the children or a more pervasive and general sense of entitlement? Another population worthy of study would be criminal offenders. Understanding the level of XD in convicted felons may provide insight into a motivation for crime and suggest different rehabilitation strategies and/or the likelihood of recidivism.

The examination of XD within populations involved in litigation for the receipt of compensation for damages may also be useful. Often times court settlements seem excessive for the damages incurred (e.g., the case of the individual who spilled hot McDonald's coffee on herself and settled out-of-court for millions in damages). The XD21 scale could provide insight into the mentality of individuals who believe they are owed compensation for such "damages". For instance, are individuals who pursue legal action to recover compensation for damages higher in XD than other individuals who do not pursue legal action? Alternately, the effect of such litigation on the recipient of successful lawsuits might be examined through the use of the XD21. For instance, do individuals who receive disproportionate settlements for damages incurred need to justify the result, perhaps by believing that they really do *deserve* large rewards in life and even larger compensation if someone should dare interfere with them?

Actual Behaviour. Given the small size of the correlations found between self-reported and observer-rated behaviours in Study 2, a further examination of behaviour and XD21 would be appropriate. Although the generation of a list of behaviours is an expeditious method to examine behavioural correlates, it might be necessary to adopt a more direct, observational approach. The actual causes of nonverbal behaviour are complex and multifaceted (Mischel, 1993) and self-reports of behavioural intentions do not always correlate with actual behaviour (Damon, 1981; Friesen, & Andrews, 1982). Furthermore, the current research generated a discrete list of

behaviours that were intended to capture attitudes of XD and may not have produced the most comprehensive list. A more naturalistic approach to the actual behavioural correlates of high XD21 scorers is necessary. For instance, a sample of participants, with meaningful high scores on the XD21, might keep a diary over the course of a few weeks. Interpersonal conflicts, reactions from others, and associated behaviours could be recorded. An analysis of several such diaries might provide evidence of common XD behaviours and interpersonal consequences. Such an approach might be taken from a self or observer perspective (e.g., employ the spouse of a high XD individual to complete the observations).

Replication of Raffle Ticket Study. Study 3 suffered from a necessarily small sample size and possible problems in randomization. Therefore, an extension and replication of Study 3 is warranted. The results of Study 3 also suggest that some of the conditions may be eliminated in favour of conditions that maximize or minimize the degree of situational constraint. For instance, two conditions might be adequate, one condition that provides little or no variance in the number of tickets previous participants take (i.e., all participants take 5 tickets) versus a condition where half the participants take 1 or 2 tickets and the other half take 10 tickets. In this way, the mean number of tickets on each list would be identical and only the situational constraints would be manipulated. Provided larger samples could be obtained, this would provide a better test of the relationship between XD21 scores and situational constraints.

Measures of Well-Being and the XD21. One obvious question concerning the construct of exaggerated deservingness is its relationship with well-being. Overall, the construct of XD appears to reflect negative characteristics with regard to interpersonal attitudes and the willingness to engage in counter-normative behaviour (e.g., lying). However, it is unclear that these relationships support the construct of XD as necessarily detrimental. As indicated in the discussion above, XD might be adaptive from an

achievement-oriented perspective if you consider that individuals high in XD are driven to higher aspirations of success, prosperity, and comfort. Thus it is necessary to examine the relationship of the XD21 with traditional measures of well-being and mental health. Such studies could compare the XD21 to measures of anxiety, depression, or general symptom checklists (e.g., Symptom Check List - 90 item). It would also be useful to examine systematically the relationship of the XD21 to measures of relationship functioning (e.g., Inventory of Interpersonal Problems [Horowitz, Rosenberg, Baer, & Ureno, 1988]) to either confirm or deny the existence of actual interpersonal difficulties.

Birth Order. The results with regard to birth order suggest that higher scores on the XD21 are associated with being the youngest child or an only child. These results can be interpreted in a social learning framework that includes parental expectations and reactions towards the youngest or only child. However, the current research did not provide specific evidence to support or negate the social learning interpretation and a program of research that explores directly these issues would be valuable. Furthermore, the examination of sex differences in the relationship between birth order and exaggerated deservingness might provide important clarification that could not be obtained in the current sample due to an unusual split of birth order among the male respondents (i.e., only one male child was identified as an only child). It appeared that higher XD21 scores were associated with being a female only child and not necessarily with being the youngest sibling. For males, this pattern might be reversed such that being an only child is not related to higher XD21 scores but being the youngest sibling is.

Privileged versus Compensatory XD. Further exploration of compensatory versus privileged XD is essential. Although it should be possible to detect XD with the XD21 regardless of the orientation towards compensation or privilege, it might be useful to differentiate the two groups and re-examine the correlates of XD21 scores. Although the current research discussed the compensatory path as a potential path

to higher XD, the research was not in position to strongly support this manifestation. In fact, the strong positive correlations between superiority and XD21 scores in Study 1 suggest that the compensatory path may not account for a significant portion of the variance in XD. However, a reliable, but weak, negative correlation in the female sample of Study 1 indicated that XD21 scores were associated with perceptions of disadvantage in childhood. This result could support the hypothesis that perceptions of disadvantage only weakly influence XD. Alternately, general perceptions of childhood upbringing may not sufficiently capture the necessary attitudes that relate to XD. Future research should examine the relationship between XD and perceptions of status on specific dimensions (e.g., social, intellectual, material status) and at various stages of development (e.g., childhood, adolescence, adult).

Developmental Considerations. Greater understanding of the origins of XD may provide evidence to support pervasive (e.g., multi-setting) versus domain-specific manifestations of XD. For instance, the development of XD early in development may lead to a more global, pervasive sense of exaggerated entitlement in multiple domains. In contrast, an individual may have certain experiences later in life that encourage an exaggerated sense of entitlement only within a certain domain (e.g., the experience of academic success might encourage an individual to believe that their research deserves recognition over and above all other scholars).

Unidimensionality of the XD21. Although the results of the current investigation support the conceptualization of XD as a unidimensional construct, it is still possible to conceive of specific factors that might represent various elements of the exaggerated deservingness continuum. In much the same way as intelligence or self-esteem are measured as global constructs first and then broken into factor scores, exaggerated deservingness might be best represented as a global score followed by more descriptive factor scores (e.g., interpersonal demands versus material demands). The

investigation of this possibility would require the generation of additional items to adequately cover each content area deemed essential to XD.

Conclusion

The development of the Exaggerated Deservingness scale - 21 item will greatly assist continued exploration of the construct of exaggerated deservingness. The evidence provided here suggests that the XD21 is a valid and psychometrically sound instrument demonstrating interesting relationships with related constructs. An untapped, and almost unlimited field of research awaits investigation. Undoubtedly, this research and the XD21 will receive the attention it *so rightly deserves!*

Endnotes

1. Early on in the formulation of items for the XDS it was discovered that reverse coded items often appeared nonsensical or ambiguous. Exaggerated deservingness represents an extreme on the continuum of deservingness (e.g., "I deserve to have everything work out for me") and a true, reverse-coded item is difficult to generate (e.g., "I don't deserve to have everything work out for me" or "I deserve to have everything not work out for me"). Responses to reverse-coded items are more difficult to interpret as well because an individual with normal deservingness might reject an item that reflects the exact opposite of exaggerated deservingness, e.g., Things should never work out well for me, just as an individual with XD would reject the item.
2. Although sex and gender are conceptually different, Feingold (1994) uses the terms interchangeably and presumably refers to sex differences.

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Appendix A.1

Factor Loadings for the Deferment of Gratification Scale

Eigen Value		Factor 1
		3.30
	Item	Loading
1.	I prefer to save my money rather than spend it right away.	.86
2.	I enjoy a thing all the more because I have waited for it and planned for it.	.23
3.	I used to save spare change as a child.	.33
4.	When I am in a supermarket, I tend to buy a lot of things I hadn't planned on.	.53
5.	I am constantly broke.	.64
6.	I agree with the philosophy: "Eat, drink, and be merry, for tomorrow we may be all dead".	.32
7.	I would describe myself as being too impulsive for my own good.	.63
8.	I often find that it is worthwhile to wait and think things over before deciding.	.40
9.	I like to spend my money as soon as I get it.	.84
10.	It is hard for me to keep from blowing my top when someone gets me very angry.	.30
11.	I can tolerate waiting for things fairly easily.	.34
12.	I am good at planning things way in advance.	.36

Appendix A.2

Factor Loadings for the Interpersonal Orientation Scale

Eigen Value	Item	Factor 1	Factor 2	Factor 3
		3.68	2.53	2.00
		Loading	Loading	Loading
	1. I would rather think about a personal problem by myself than discuss it with others.		.61	
	2. I consider myself a forgiving person.		.55	
	3. Other people are the source of my greatest pleasure and pain.	.53		
	4. I am interested in know what makes people tick.			.55
	5. When I receive a gift, I find myself thinking about how much it must be worth.	.40		
	6. Under no circumstances would I buy something I suspected had been stolen.		.33	
	7. I am greatly influenced by the moods of the people I am with.	.60		
	8. Sometimes the most considerate thing one person can do for another is to hide a bit of the truth.	--	--	--
	9. Sometimes simply talking aloud about things that bother me makes me feel better - regardless of who, if anyone, hears these thoughts.		.38	
	10. My friends and I seem to share the same musical interests.		.36	
	11. I am reluctant to talk about my personal life with people I do not know well.		.33	
	12. I generally view myself as a person who is not terribly interested in what other people are really like.		.41	
	13. Sometimes I think I take things that other people say to me too personally.	.51		
	14. It's important for me to work with people with whom I get along well, even if that means I get less done.	.52		
	15. I often find myself wondering what my professors are really like.			.78
	16. If I were to share an apartment with somebody, I would want to find out about the person's family background, hobbies, and so forth.	--	--	--
	17. I would prefer to do poorly on an exam that is machine scored rather than do equally poorly on one that is graded by the instructor.	.32		
	18. I tend to like people who are good looking.	.40		

(table continues)

19. What others think about my actions is of little or no consequence to me.	.45		
20. The more other people reveal about themselves, the more inclined I feel to reveal things about myself.		.38	
21. When someone does me a favor I don't usually feel compelled to return it.		.31	
22. Sitting on a bus or a LRT, I sometimes imagine what the person sitting next to me does for a living.			.70
23. The more I am with others, the more I tend to like them.	--	--	--
24. I would rather be given a simple and thoughtful gift than a more extravagant one that involved less thought and care.		.50	
25. I am very sensitive to criticism.	.66		
26. When people tell me personal things about themselves, I find myself feeling close to them.		.67	
27. One good turn does not necessarily deserve another.	--	--	--
28. I can be strongly affected by someone smiling or frowning at me.	.62		
29. I find myself wondering what telephone operators are really like.			.66

Note. Only loadings greater than .30 are shown.

(--) indicates item not included on any factor

Appendix A.3

Factor Loadings for the Machiavellian-IV Scale

		Factor 1	Factor 2	Factor 3
		4.15	1.65	1.49
Eigen Value	Item	Loading	Loading	Loading
	1. Never tell anyone the real reason you did something unless it is useful to do so.	.67		
	2. The best way to handle people is to tell them what they want to hear.	.57		
	3. One should take action only when sure it is morally right.		.41	
	4. Most people are basically good and kind.			.70
	5. It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.	.62		
	6. Honesty is the best policy in all cases.		.74	
	7. There is no excuse for lying to someone else.		.74	
	8. Generally speaking, people won't work hard unless they're forced to do so.	.46		
	9. All in all, it is better to be humble and honest than to be important and dishonest.	.40	.55	
	10. When you ask someone to do something for you, it is best to give the real reasons for wanting it rather than giving reasons which carry more weight.		.49	
	11. Most people who get ahead in the world lead clean, moral lives.			.47
	12. Anyone who completely trusts anyone else is asking for trouble.	.56		.41
	13. The biggest difference between most criminals and other people is that the criminals are stupid enough to get caught.	.57		
	14. Most people are brave.			.66
	15. It is wise to flatter important people.		.33	
	16. It is possible to be good in all respects.		.33	.37
	17. Barnum was wrong when he said that there's a sucker born every minute.			.58
	18. It is hard to get ahead without cutting corners here and there.	.56		
	19. People suffering from incurable diseases should have the choice of being put painlessly to death.		.31	
	20. Most men forget more easily the death of their father than the loss of their property.	--	--	--

Note. Only loadings greater than .30 are shown.

(--) indicates item not included on any factor

Appendix A.4

Factor Loadings for the Marlowe-Crowne Social Desirability Scale (short form)

Eigen Value		Factor 1
		2.33
	Item	Loading
1.	I like to gossip at times.	.33
2.	There have been occasions when I took advantage of someone.	.62
3.	I'm always willing to admit it when I make a mistake.	.53
4.	I always try to practice what I preach.	.36
5.	I sometimes try to get even, rather than forgive and forget.	.65
6.	At times I have really insisted on having things my own way.	.55
7.	There have been occasions when I felt like smashing things.	.31
8.	I never resent being asked to return a favor.	.42
9.	I have never been irked when people expressed ideas very different from my own.	.37
10.	I have never deliberately said something that hurt someone's feelings.	.54

Appendix A.5

Factor Loadings for the Need for Uniqueness Scale

Eigen Value	Item	Factor 1	Factor 2	Factor 3
		6.74	2.21	1.73
		Loading	Loading	Loading
	1. When I am in a group of strangers, I am not reluctant to express my opinion publicly.	.46		
	2. I find that criticism affects my self-esteem.			.58
	3. I sometimes hesitate to use my own ideas for fear they might be impractical.	.48		
	4. I think society should let reason lead it to new customs and throw aside old habits or mere traditions.		.42	
	5. People frequently succeed in changing my mind.	.38		
	6. I find it sometimes amusing to upset the dignity of teachers, judges, and "cultured" people.		.51	
	7. I like wearing a uniform because it makes me proud to be a member of the organization it represents.			.46
	8. People have sometimes called me "stuck-up".	--	--	--
	9. Others' disagreements make me uncomfortable.			.31
	10. I do not always need to live by the rules and standards of society.		.53	
	11. I am unable to express my feelings if they results in undesirable consequences.			.46
	12. Being a success in one's career means making a contribution that no one else has made.	--	--	--
	13. It bothers me if people think I am being too unconventional.			.53
	14. I always try to follow rules.		.54	
	15. If I disagree with a superior on his or her views, I usually do not keep it to myself.	.63		
	16. I speak up in meetings in order to oppose those whom I feel are wrong.	.74		
	17. Feeling "different" in a crowd of people makes me feel uncomfortable.			.56
	18. If I must die, let it be an unusual death rather than an ordinary death in bed.		.46	
	19. I would rather be just like everyone else than be called a "freak".	.37		.53
	20. I must admit I find it hard to work under strict rules and regulations.		.64	
	21. I would rather be known for always trying new ideas than for employing well-trusted methods.	.39		
	22. It is better to agree with the opinions of others than to be considered a disagreeable person.	.54		

(table continues)

23. I do not like to say unusual things to people.			.40
24. I tend to express my opinions publicly, regardless of what others say.	.73		
25. As a rule, I strongly defend my own opinions.	.67		
26. I do not like to go my own way.	.52		
27. When I am with people, I agree with their ideas so that no arguments will arise.	.52		
28. I tend to keep quiet in the presence of persons of higher rank, experience, etc.	.59		.34
29. I have been quite independent and free from family rule.	--	--	--
30. Whenever I take part in group activities, I am somewhat of a nonconformist.	.33		
31. In most things in life, I believe in playing it safe rather than taking a gamble.		.40	
32. It is better to break rules than always to conform with an impersonal society.		.65	

Note. Only loadings greater than .30 are shown.
(--) indicates item not included on any factor

Appendix A.6

Factor Loadings for the Self-Sacrifice Scale

		Factor 1
		4.07
Eigen Value	Item	Loading
	1. I put others' needs before my own or else I feel guilty.	.65
	2. I feel guilty when I let other people down or disappoint them.	.43
	3. I give more to others than I get back in return.	.60
	4. I'm the one who usually ends up taking care of the people I'm close to.	.63
	5. There is almost nothing I couldn't put up with if I loved someone.	.34
	6. I am a good person because I think of others more than of myself.	.61
	7. At work, I'm usually the one to volunteer to do extra tasks or to put in extra time.	--
	8. No matter how busy I am, I can always find time for others.	.42
	9. I can get by on very little because my needs are minimal.	--
	10. I'm only happy when those around me are happy.	.32
	11. I'm so busy doing for the people that I care about that I have little time for myself.	.67
	12. I've always been the one who listens to everyone else's problems.	.50
	13. I'm more comfortable giving a present than receiving one.	.43
	14. Other people see me as doing too much for others and not enough for myself.	.69
	15. No matter how much I give, it is never enough.	.55
	16. If I do what I want, I feel very uncomfortable.	--
	17. It's very difficult for me to ask others to take care of my needs.	.39

Note. (--) indicates item removed from scale

Appendix A.7

Factor Loadings for the Superiority Scale

Eigen Value		Factor I
		3.93
	Item	Loading
1.	My friends follow my lead.	.55
2.	I deserve favors from others.	--
3.	I'm witty and charming with others.	.49
4.	My looks are one of the things that attract others to me.	.51
5.	I could show up my friends if I wanted to.	.39
6.	Running the show means a lot to me.	.52
7.	Being admired by others helps me feel fantastic.	.35
8.	Achieving out of the ordinary accomplishments would make me feel complete.	.34
9.	I catch myself wanting to be a hero.	.43
10.	I know that I have more natural talent than most.	.65
Additional Items		
11.	I am going to be a great person.	.55
12.	I am an extraordinary person.	.60
13.	I know that I am good because everybody keeps telling me so.	.57
14.	If I ruled the world it would be a much better place.	.56
15.	I am more capable than other people.	.70

Note. (--) indicates item removed from scale

Appendix A.8

Factor Loadings for the Rosenberg Self-Esteem Scale

Eigen Value		Factor I
		4.98
	Item	Loading
1.	I feel that I am a person of worth, at least on an equal basis with others.	.61
2.	I feel that I have a number of good qualities.	.60
3.	All in all, I am inclined to feel that I am a failure.	.75
4.	I am able to do things as well as most other people.	.47
5.	I feel I do not have much to be proud of.	.69
6.	I take a positive attitude toward myself.	.82
7.	I wish I could have more respect for myself.	.72
8.	I certainly feel useless at times.	.73
9.	At times I think I am no good at all.	.77
10.	On the whole, I am satisfied with myself.	.81

Appendix B.1

Correlations Matrix of all Additional Scales (N = 303)

Scale	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. DOG	(.72)								
2. IO	-.05	(.68)							
3. IO1	-.21**	.73**	(.51)						
4. IO2	.12*	.74**	.21**	(.61)					
5. IO3	-.10	.48**	.26**	.18**	(.65)				
6. Mach	-.22**	-.14*	.09	-.37**	-.06	(.78)			
7. Mach1	-.15**	-.12*	.08	-.33**	-.10	.78**	(.65)		
8. Mach2	-.15**	-.12*	.08	-.34**	-.05	.82**	.45**	(.72)	
9. Mach3	-.18**	-.08	-.03	-.13*	.04	.63**	.28**	.37**	(.58)
10. M-C	.26**	-.08	-.27**	.14*	.05	-.45**	-.41**	-.34	-.26**
11. NFU	-.18**	-.22	-.29**	-.13*	.11*	.14*	.09	.03	.25**
12. NFU1	-.05	-.17**	.28**	-.03	.10	-.03	-.05	-.08	.14*
13. NFU2	-.33**	-.10	-.04	-.19**	.09	.35**	.26**	.25**	.27**
14. NFU3	-.03	-.29**	-.44	-.08	.08	-.02	-.02	-.13*	.17**
15. RSE	.16**	-.08	-.32**	.14*	.09	-.29**	-.14*	-.28**	-.16**
16. SS	-.07	.27**	.25**	.13*	.12*	-.13*	-.16**	.02	-.24**
17. Sup	-.10	.12*	.08	.01	.14*	.22**	.20**	.26**	.08

(table continues)

Scale	10.	11.	12.	13.	14.	15.	16.	17.
1. DOG								
2. IO								
3. IO1								
4. IO2								
5. IO3								
6. Mach								
7. Mach1								
8. Mach2								
9. Mach3								
10. M-C	(.62)							
11. NFU	.00	(.85)						
12. NFU1	.07	.87**	(.84)					
13. NFU2	-.20**	.72**	.43**	(.68)				
14. NFU3	.22**	.77**	.57**	.36*	(.70)			
15. RSE	.32**	.35**	.39**	.06	.40**	(.88)		
16. SS	.01	-.18**	-.09	-.09*	-.26**	-.25**	(.79)	
17. Sup	-.20**	.37**	.38**	.32**	.09	.32**	.04	(.79)

* = $p < .05$

** = $p < .01$

Note. alpha coefficients for each scale are located on the diagonal

XD21 - Exaggerated Deservingness Scale
 DOG - Deferment of Gratification Scale
 IO - Interpersonal Orientation Scale
 IO1 - Factor 1: reactivity to behavior of others
 IO2 - Factor 2: residual category
 IO3 - Factor 3: interest in what other people are like
 Mach - Machiavellianism Scale
 Mach1 - Factor 1: negative view of people
 Mach2 - Factor 2: deceitfulness
 Mach3 - Factor 3: rejection of good in people

M-C - Marlowe-Crowne Social Desirability Scale
 NFU - Need for Uniqueness Scale
 NFU1 - Factor 1: willingness to speak one's mind
 NFU2 - Factor 2: willingness to break rules
 NFU3 - Factor 3: lack of concern with reactions of others
 RSE - Rosenberg Self-Esteem Scale
 SS - Self-Sacrifice Scale
 Sup - Superiority Scale

Appendix C.1

Factor Loadings for Items on the Behavioural Exemplars of Exaggerated Deservingness Scale

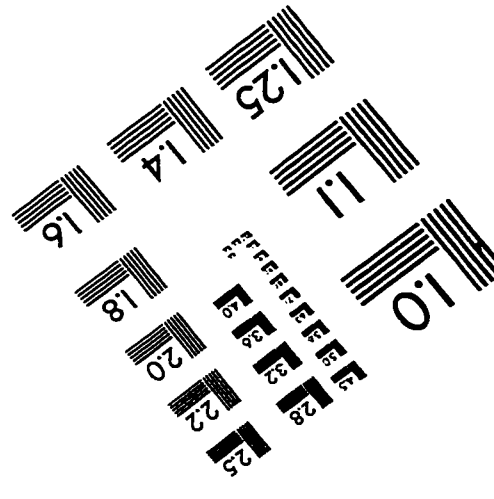
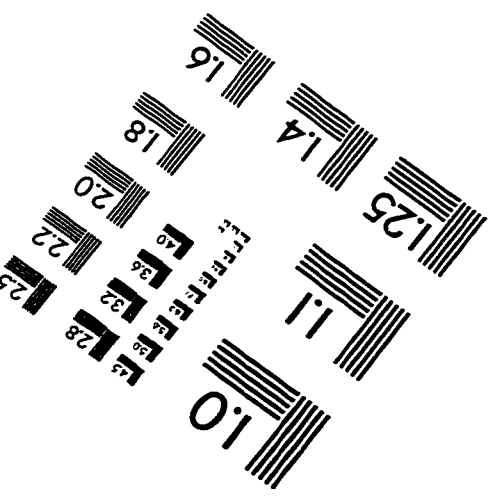
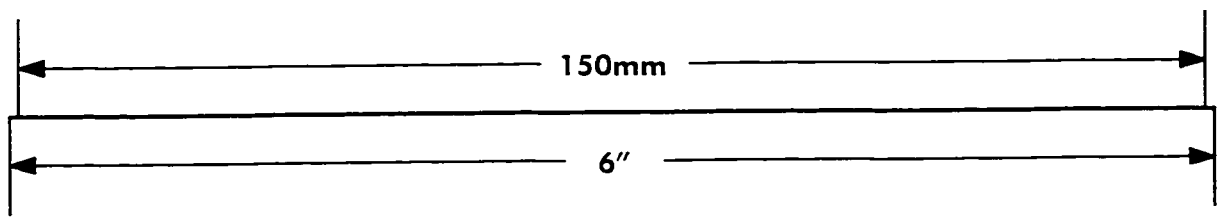
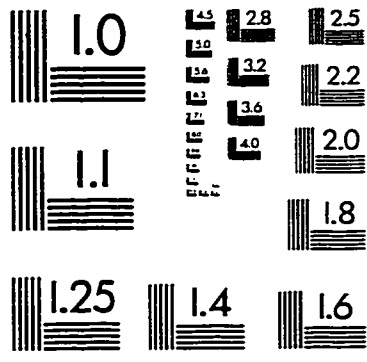
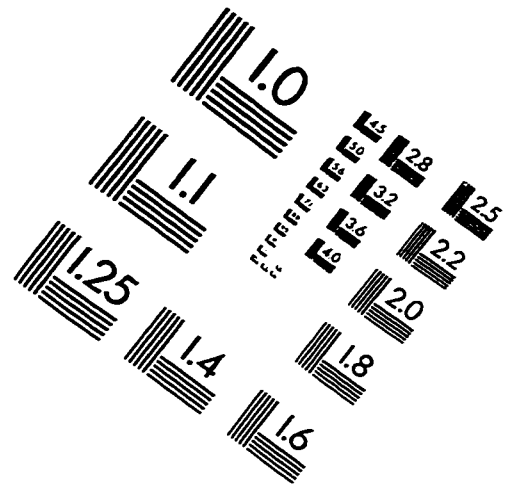
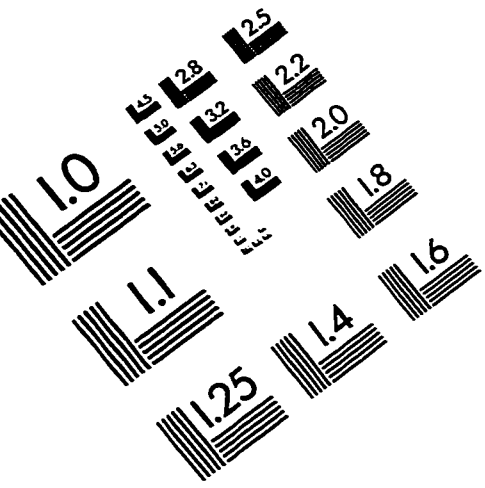
	Factor 1 - Motor Vehicle		Factor 2 - Interpersonal		Factor 3 - Self-Centered	
	Self	Other	Self	Other	Self	Other
driven much faster than posted speed limit	.64	.77				
intentionally disobeyed a traffic sign or signal	.81	.84				
ran a red light	.82	.79				
parked in a way that takes up the space of two stalls	.35	.57				
passed other vehicles using a turn-only lane or using a construction lane	.62	.78				
asked for a favour from a person I did not know very well			.54	.78		
called someone so early in the morning, or late at night, that I woke them out of bed			.34	.20		
made plans with someone and then changed them because something better came up			.34	.34		
carelessly damaged or broke something that didn't belong to me			.41	---		
intentionally littered			.43	---		
interrupted someone who was speaking			.56	.63		

(table continues)

stood on a pathway or sidewalk talking to a friend (and blocking the flow of traffic)	.63	.33		
found an item which I kept for myself rather than turning in to the lost and found			.56	.64
cheated on an exam			.66	.68
taken something from a store without paying			.43	.60
pushed ahead of someone in line			.29	.30
illegally parked in a handicapped stall	.41		.46	.47
asked for an extension on an assignment that was due			.58	.33

Note. Only factor loadings > .30 are shown.

IMAGE EVALUATION TEST TARGET (QA-3)



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