Savannah Barrett

College of Arts and Sciences, Maryville University

PSYC 358: Psyc Tests and Measurement

Professor Jessica Nguyen Herridge

15 December 2024

It is well known that discussing selfishness as a personality trait is distasteful and taboo; however, it is important to acknowledge that selfish motives can lead to selfless acts. Selfishness is defined as "the dominance of self-interest over the interests of others" (Frimer, Schaefer, & Oakes, 2014). That definition fails to consider that deception can be at the root of many selfless acts. Not many can claim true altruism—behavior that promotes the increase of others' welfare driven by a selfless concern for others—because the conditions for pure altruism are nonexistent (Barasch, Levine, Berman, & Small, 2014). Many individuals may appear to be selfless or altruistic because their actions convey those characteristics, although their motives may be contradictory. One may act selflessly for selfish reasons, such as power, reputation, personal benefits (material, social, or intrapsychic), guilt, credit acquisition, and/ or status (Barasch, Levine, Berman, & Small, 2014). While selfless actions may produce results beneficial to all parties, the selfish motivation behind the acts is an important factor to consider when evaluating behavior on sociological and psychological levels. Because of the connection between those two personality traits, this construct has more than one component.

Selfless acts are carried out for a multitude of reasons, such as trust, voluntary sacrifice, honesty, and/ or hope. These motivations are dependent upon one's worldview, whether one's actions align more with being a pessimist, a realist, or an optimist, including how it relates to their perception of themselves and those around them. As discussed by Taylor, altruistic people do not see themselves as special, but rather ordinary in relation to others (2023). The circumstances in which one is raised are the models for which they will grow their own perceptions, behavioral habits, and personal goals in life. For instance, if one were to witness their parents or those around them making donations when they had the means to do so, it may

motivate them to follow suit once they reach adulthood and have the means to do the same. Similarly, another study was conducted to examine selfishness, which included items such as "I tend to want others to admire me;" "I tend to want others to pay attention to me;" "I tend to expect special favors from others;" and "I tend to seek prestige or status" (Lien et al., 2022). Getting an understanding of the participants' perceptions of themselves and their behaviors allowed for the authors of this study to determine the impact of selfishness on their career. Lastly, the study conducted by Frimer, Schaefer, and Harrison referenced prosocial goals, such as helping others in need, making sacrifices for the sake of others' happiness, and much like the previous study mentioned, self-promoting goals of prestige or power over others (2014). All of those items provided guidance for the items created in the present study.

It is important to note that discussing such a topic can promote guilt or shame; therefore, the way in which the items were worded for the present study reflected caution and objectiveness. For instance, the study conducted by Lien et al. recommended that future research should ensure that the participants have a clear understanding of the terminology or phrasing used in the items in question, including the avoidance of vague language (2022). Taking that into consideration, a study conducted by Brazil, Volk, and Dane (2023) included the operationalized definitions of the three types of empathy being measured: affective empathy, cognitive empathy, and sympathetic empathy. As defined in that study, affective empathy "relates to actually feeling others' emotions," cognitive empathy "involves a rational understanding of others' thoughts and feelings," and sympathetic empathy "pertains to caring about another person's distress and desiring to help through action" (Brazil, Volk, & Dane, 2023).

The present study considered the items and measures used to examine selfishness, while simultaneously taking into account how selfless acts can be rooted in selfish intent. The

following study design and methods reflect those considerations. It is hypothesized that the participants who were exposed to selfless behaviors in their childhood are more likely to act selflessly in their adulthood. It was also hypothesized that individuals who tend to have selfish perceptions of themselves and others are less likely to act selflessly. The third hypothesis was that those who do not act selflessly and empathetically are those who feel less connected to their community and more connected to themselves and their own goals.

Methods

Pilot Testing

The present study was submitted to pilot testing, involving the survey being shared to peers to undergo evaluative criticism to recommend changes to the formatting or survey items. The results of the pilot test found that items 20, 21, and 22 needed to be revised to include complete context for the participant, as well as requiring that item 19 be added to that group of similar items. Other grammatical and wording concerns were addressed, allowing for the revision of items 12, 15, and 16 to ensure that the participants had a full understanding of the phrase. The result of the pilot testing was the completion of 24 items total. The final items are as follows:

- (1) I am a pessimist.
- (2) I am a realist.
- (3) I am an optimist.
- (4) I view myself as a connected member of my community.
- (5) I view myself as disconnected from my community.

- (6) I view myself as ordinary, no different from anyone else.
- (7) I view myself as extraordinary, special in comparison to others.
- (8) I tend to want others to pay attention to me.
- (9) I tend to want others to admire me.
- (10) I expect special favors from others.
- (11) I seek prestige and status.
- (12) I tend to use flattery to benefit my goals.
- (13) In my childhood, my parents or me made donations when/if we had the means to do so.
- (14) *In my adulthood, I make donations when/ if I have the means to do so.*
- (15) I will make a donation if it's guaranteed to benefit me in some way.
- (16) I will make a donation even if it's not guaranteed to benefit me in some way.
- (17) I will help a stranger in need even if I have to make a sacrifice or put myself at risk.
- (18) I will help someone I know (friend/family/coworker) in need even if I have to make a sacrifice or put myself at risk.
- (19) I am in front of Person B in line to check out at the grocery store. I have a full cart; Person B has 3 items. I will not let Person B go in front of me in line.
- (20) I am in front of Person B in line to check out at the grocery store. I have a full cart; Person B has 3 items. I will let Person B go in front of me in line because I have more items.

- (21) I am in front of Person B in line to check out at the grocery store. I have a full cart; Person B has 3 items. I will let Person B go in front of me in line because they told me they are in a rush to get to work.
- (22) I am in front of Person B in line to check out at the grocery store. I have a full cart; Person B has 3 items. I will let Person B go in front of me in line because they told me they are in a rush to get to the hospital to visit a dying loved one.
- (23) When no one is around, I will help someone in need, despite circumstances.
- (24) when there are others around, I will help someone in need, despite circumstances.

Items 1, 2, and 3 were chosen to categorize the participants' worldview, as one's personality is a direct reflection of such. Items 4 and 5 were written to investigate the participants' perception of their community involvement. Items 6-12 were written to gain insight on the participants' introspective self-perception of their own behaviors. To evaluate the role models of test takers and the behavioral results of being exposed to selfish or selfless acts, Items 13 and 14 were created. Items 15-18 measure the participants' social relationships and actions that relate to their willingness to be selfless as well as possible selfish intent. Inspired by the study conducted by Brazil, Volk, and Dane (2023), Item 19 measures the participants' lack of empathy, Item 20 measures cognitive empathy, Item 21 measures affective empathy, and Item 22 measures sympathetic empathy. Lastly, Item 23 evaluates the participants' willingness to be selfless when others are not there to observe it, and Item 24 evaluates their willingness to be selfless when others are there to witness it as well as the consideration of taking initiative to help when others have the opportunity to become involved instead.

Participants

There were 40 survey responses, though only 38 of the participants fully completed the survey. Of those 38, only 36 participants submitted a response for the age demographic item. The age groups and number of participants in those age groups are as follows: 18-26 years old (12 participants), 27-39 years old (10 participants), 40-55 years old (10 participants), and 56+ years old (4 participants). The majority of those participants were White, and only three participants were biracial, though one of those participants did not complete the survey in full. One participant of the study preferred not to answer the ethnicity demographic item.

Measures

The self-report survey was created on Qualtrics, and the link was shared to two personal social media outlets. From there, participants would click the link to complete the survey. Prior to completing the survey, including the relevant items, the participants were asked to confirm that they were above the age of 18 and consented to taking the survey. Additionally, the participants were asked to provide their age and ethnicity to allow for the retrieval of demographic data. The aforementioned survey items were statements in which the participants had to mark how much the statement represented them and their behavior, from *1- Very Untrue to 5- Very True*.

The initial reliability analysis discovered that item 5 confused the stats program (Jamovi), as it was flagged for reverse scoring, though once reversed, caused item 6 to be flagged for reversal as well, despite it not showing a negative loading. Then when it was reversed, it loaded negatively. This did not lead to the removal of Item 6, as it did not affect the other statistical analyses. Item 19 was flagged for reverse scoring as well, but it did not cause further complications and remained reversed. The final reliability analysis revealed a Cronbach's alpha of moderately exceptional reliability, $\alpha = .830$

Scale Reliability Statistics

	Cronbach's α
scale	0.830

Item Reliability Statistics

item Kellab	llity Statistics	
		If item dropped
	Item-rest correlation	Cronbach's α
SS_1	0.0913	0.834
SS_2	0.0464	0.835
SS_3	0.2657	0.827
SS_4	0.2948	0.827
SS_6	2.61e-4	0.838
SS_7	0.0780	0.837
SS_8	0.3156	0.826
SS_9	0.4274	0.821
SS_10	0.4004	0.823
SS_11	0.4982	0.819
SS_12	0.3823	0.823
SS_13	0.6529	0.809
SS_14	0.5827	0.813
SS_15	0.4214	0.822
SS_16	0.4960	0.817
SS_17	0.5510	0.816
SS_18	0.4590	0.822
SS_19R	0.0528	0.838
SS_20	0.5283	0.818
SS_21	0.3933	0.823
SS_22	0.6023	0.812
SS_23	0.6427	0.812
SS_24	0.6253	0.812

Results

The results of this study found that gender and ethnicity were not significantly correlated with selfishness; however, age was significantly negatively correlated, indicating that as age increases, selfish behaviors and perceptions decrease. Based on a factor analysis using the extraction method of principal axis with the rotation on Varimax, it was found that a three-factor structure exists, accounting for the cumulative 102.1% of the variance. These three factors had

no cross loads above .55. Items 1, 2, 3, 4, 12, 16, 19, and 21 did not load significantly on any factor after the suppression, indicating they may need to be revised or removed. Factor 1 = Items 13, 17, 18, 20, 22, 23, and 24—Named Selfishness as it Relates to Others; Factor 2 = Items 8, 9, 10, 11, and 15—Named Selfish Perceptions and Influenced Behaviors; Factor 3 = Items 6, 7, and 14—Named General Self-Perception and Behavior.

Exploratory Factor Analysis

Fact			

		Factor		
	1	2	3	Uniqueness
SS_23	0.832			0.291
SS_24	0.829			0.295
SS_20	0.775			0.375
SS_17	0.731			0.462
SS_18	0.682			0.530
SS_22	0.646			0.452
SS_13	0.594			0.519
SS_21				0.745
SS_19R				0.776
SS_10		0.792		0.345
SS_8		0.757		0.390
SS_15		0.698		0.505
SS_11		0.677		0.470
SS_9		0.640		0.569
SS_12				0.674
SS_1				0.865
SS_7			0.626	0.576
SS_6R			0.565	0.623
SS_14			0.562	0.375
SS_3				0.682
SS_16				0.492
SS_2				0.723
SS_4				0.808

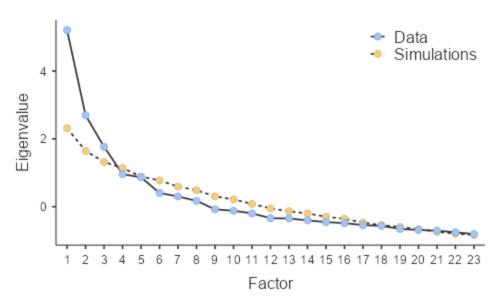
Summary

Factor	SS Loadings	% of Variance	Cumulative %
1	4.85	21.09	21.1
2	3.31	14.41	35.5
3	2.29	9.97	45.5

Note. 'Principal axis factoring' extraction method was used in combination with a 'varimax' rotation

Eigenvalues





After further examination of the data, it was also found that one participant answered '5' for all 24 items; therefore, this participant would be considered an outlier. An independent sample *t*-test found no significant differences between the average score of males (M = 3.31, SD = .486) and females (M = 3.11, SD = .523), t(36) = .985, p = .331. This difference between the groups represents a small effect, d = .376

Independent Samples T-Test

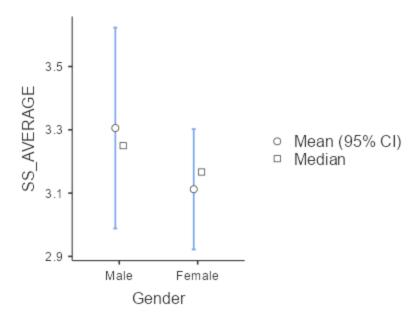
		Statistic	df	р	Mean difference	SE difference		Effect Size
SS_AVERAGE	Student's t	0.985	36.0	0.331	0.193	0.196	Cohen's d	0.376

Note. H₈ µ_{Male} ≠ µ_{Female}

Group Descriptives

	Group	N	Mean	Median	SD	SE
SS_AVERAGE	Male	9	3.31	3.25	0.486	0.162
	Female	29	3.11	3.17	0.523	0.0971

SS_AVERAGE



A Pearson correlation indicated no significant relationship between participant age and selfishness, r(33) = -.128, p = .464, .1 = small; .3 = moderate; .5 = large

_		
Orre	ation	Matrix

		Age	SS_AVERAGE
Age	Pearson's r	_	
	df	_	
	p-value	_	
	N	_	
SS_AVERAGE	Pearson's r	-0.128	_
	df	33	_
	p-value	0.464	_
	N	35	_

Note. * p < .05, ** p < .01, *** p < .001

ANOVA - SS_AVERAGE

	Sum of Squares	df	Mean Square	F	р	η²
EthnicityFR	0.299	1	0.299	1.13	0.294	0.031
Residuals	9.500	36	0.264			
						[4]

Post Hoc Comparisons - EthnicityFR

	Compa	arison					
EthnicityFF	R	EthnicityFR	Mean Difference	SE	df	t	P _{tukey}
1	-	2	-0.289	0.272	36.0	-1.07	0.294

Note. Comparisons are based on estimated marginal means

Descriptives

	EthnicityFR	SS_AVERAGE
Mean	1	3.13
	2	3.42
Standard deviation	1	0.528
	2	0.308

A one-way analysis of variance showed no significant difference between ethnicity and Selfishness Scale average, F(1, 36) = 1.13, p = .294. This difference represented a small effect, $n^2 = .031$. Specifically, post hoc Tukey tests indicated that the White participants (M = 3.13, SD = .528) averaged no different than the non-White participants (M = 3.42, SD = .308), t(36) = -1.07, p = .294

Discussion

While it was interesting to learn that selfishness decreases as age increases, the lack of proper diverse representation and having an extremely small sample size did not satisfy the possible real demographic correlations to selfishness. Considering the survey standard deviation

(SD=.515), the mean (M=3.16) indicates that more participants found the statements to be slightly untrue. If this study were to be conducted again, the similar items should be factored into groups in order to separate the items that specifically measure selfishness from the items that specifically measure selflessness. By doing so, there would be separate means and standard deviations able to be compared, in addition to their possible correlations to ethnicity, gender, and age. If there was more diverse representation of ethnicity and gender, it was believed that there would be significant relationships between them and the average selfishness score. Because there was more than one construct being measured in a single study, the data obtained cannot significantly prove or deny any of the three hypotheses. Despite those factors affecting the overall data, the items themselves are reliable and externally valid.

Limitations and Recommendations for Future Research

This study had mainly demographic limitations, such as ethnicity, gender, and age. The author of the present study relied on data from individuals in the local area of central Wisconsin, which has a primary population of White residents. Along with that, due to the participants being sought out through social media, it is evident that the author was only able to reach personal communities, friends, and/ or family members, all of which are primarily White. Similarly, the lack of male participants in this study failed to allow for a proper evaluation of the possible gender differences as it relates to selfishness—though it could be argued that the absence of male participants was caused by selfishness itself, as the author has a generally equal distribution of genders on social media outlets. Finally, the number of participants in the age groups 18-26, 27-39, and 40-55 were almost equal, excluding proper representation from the age group of 56+. It is recommended that future research in regard to the topic of selfishness not rely on participants obtained through social media and local connections. It is also suggested that the survey be

available for a longer period of time to allow for proper representation of all ethnicities, genders, and ages to be procured, including the acquisition of a much larger sample size.

References

- Barasch, A., Levine, E.E., Berman, J.Z., & Small, D.A. (2014). Selfish or selfless? On the signal value of emotion in altruistic behavior. *Journal of Personality and Social Psychology*, 107(3), 393-413. https://dx.doi.org.proxy.library.maryville.edu/10.1037/a0037207
- Brazil, K.J., Volk, A.A., & Dane, A.V. (2023). Is empathy linked to prosocial and antisocial traits and behavior? It depends on the form of empathy. *Canadian Journal of Behavioural*Science, 55(1), 75-80. https://dx.doi.org.proxy.library.maryville.edu/10.1037/cbs0000330
- Frimer, J.A., Schaefer, N.K., & Oakes, H. (2014). Moral actor, selfish agent. *Journal of Personality and Social Psychology*, 106(5), 790-802. https://dx.doi.org.proxy.library.maryville.edu/10/1037/a0036040
- Lien, T.T.H., Anh, T.T., Anh, T.N., Anh, L.H.T, & Thao, N.T.T. (2022). Selfish personalities influencing start-up intention and motivation: a study of Vietnam. *Journal of Innovation & Entrepreneurship*, 11(1), 1-19.

 http://proxy.library.maryville.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=155261894&site=eds-live&scope=site
- Taylor, S. (2023). The mind of a hero: what lays the groundwork for acts of selfless altruism?

 *Psychology Today, 56(5), 44-45.

 http://proxy.library.maryville.edu/login?url=https://search.ebscohost.com/login.aspx?dire

 ct=true&db=ulh&AN=170735302&site=eds-live&scope=site

Qualtrics Survey

Hello and Welcome!
My name is Savannah, and I am collecting data for a college class project. As a result, the data collected is possibly not
reliable or valid, and it will only be presented in class. Your participation in this survey is voluntary, and your responses
will be anonymous and confidential. The only requirement to participate is that the person completing this survey must
be at least 18 years old.
Thank you!
O I am at least 18 years old and agree to participate.
O I am not 18 years old or do not agree to participate.
What is your age?
O 18-26
O 27-39
O 40-55
○ 56+

What is your gender?
O Male
O Female
O Non-binary / third gender
O Prefer not to say
What is your race? (Mark all that apply).
African American or Black
American Indian (Native American) or Alaska Native
Asian
Hispanic/Latinx
Native Hawaiian or Other Pacific Islander
☐ White
☐ Bi or Multiracial

Selfishness Scale Other Prefer not to disclose For each statement below, please mark how much the statement represents you and your behavior generally, from 1-Very Untrue to 5- Very True Very Very Untrue Untrue Neutral True True 1 2 3 4 5 I am a pessimist. I am a realist. I am an optimist. I view myself as a connected member of

my community.

community.

I view myself as disconnected from my

I view myself as ordinary, no different from anyone else.	\circ	\circ	\circ	\circ	0
I view myself as extraordinary, special in comparison to others.	\circ	\circ	\circ	\circ	0
I tend to want others to pay attention to me.	0	\circ	\circ	\circ	0
I tend to want others to admire me.	\bigcirc	\circ	\circ	\circ	\circ
I expect special favors from others.	\circ	\circ	\circ	\circ	\circ
I seek prestige and status.	\circ	\circ	\circ	\circ	\circ
I tend to use flattery to benefit my goals.	\circ	\circ	\circ	\circ	0
In my childhood, my parents or me made donations when/ if we had the means to do so.	0	0	0	0	0
In my adulthood, I make donations when/ if I have the means to do so.	\circ	\circ	\circ	\circ	\circ
I will make a donation if it's guaranteed to benefit me in some way.	\circ	\circ	\circ	\circ	0
I will make a donation even if it's not guaranteed to benefit me in some way.	\circ	\circ	\circ	\circ	0
I will help a stranger in need even if I have to make a sacrifice or put myself at risk.	0	\circ	\circ	\circ	\circ
I will help someone I know (friend/ family/ coworker) in need even if I have to make a sacrifice or put myself at risk.	0	0	0	0	0
I am in front of Person B in line to check out at the grocery store. I have a full cart; Person B has 3 items. I will not let Person B go in front of me in line.	0	0	0	0	0
I am in front of Person B in line to check out at the grocery store. I have a full cart; Person B has 3 items. I will let Person B go in front of me in line because I have more items.	0	0	0	0	0

I am in front of Person B in line to check out at the grocery store. I have a full cart; Person B has 3 items. I will let Person B go in front of me in line because they told me they are in a rush to get to work.	0	0	0	0	0
I am in front of Person B in line to check out at the grocery store. I have a full cart; Person B has 3 items. I will let Person B go in front of me in line because they told me they are in a rush to get to the hospital to visit a dying loved one.	0	0	0	0	0
When no one is around, I will help someone in need, despite circumstances.	\circ	\circ	\circ	\circ	\circ
When there are others around, I will help someone in need, despite circumstances.	0	0	0	0	0

We thank you for your time spent taking this survey. Your response has been recorded.