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An International Journal on Personal Relationships

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Loneliness, Stigma, and the Tendency for Interpersonal Victimhood Inhibit Compassion for Some but Not All Suffering Social Groups

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Interpersona, 2024, Vol. 18(2), 216–237, https://doi.org/10.5964/ijpr.11807

Received: 2023-04-24 • **Accepted:** 2024-05-07 • **Published (VoR):** 2024-12-20

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Supplementary Materials: Preregistration [see Index of Supplementary Materials]

Abstract

This study extends recent research on correlates of compassion for suffering social groups. Using a nationally representative sample of 627 U.S. adults, this study used cross-sectional survey data to determine if loneliness, the tendency for interpersonal victimhood, and stigmatizing attitudes held toward suffering social groups correlated with less compassion for suffering social groups. Participants were randomly assigned to respond in regard to one of three suffering social groups: adults who are addicted to opioids, unemployed adults who have been hurt by the rising prices of goods and services, or women who do not have access to reproductive health care in their area. Both main effects and interaction effects were hypothesized. Results showed significant main effects in which loneliness, stigmatizing attitudes held towards a suffering social group, and the tendency for interpersonal victimhood were negatively related to compassion felt for suffering social groups. Additional exploratory analyses showed that these main effects depended on the specific suffering social group. Whereas all three variables inhibited compassion for adults addicted to opioids, only loneliness and stigmatizing attitudes inhibited compassion for the unemployed, and only stigmatizing attitudes inhibited compassion for women lacking access to reproductive health care. These findings can be used to guide the development of future interventions that may address issues that inhibit compassion towards those who are suffering, particularly those in suffering social groups that are stigmatized.

Keywords

compassion, suffering, loneliness, victimhood, stigmatization, abortion

Non-Technical Summary

Background

Research has consistently shown the importance of maintaining meaningful relationships for people's mental and physical health, yet throughout the world the percentage of people who report being lonely continues to rise. Studies have shown how loneliness affects us mentally and physically, but less work has been done on how being lonely affects if and how we interact with other people. One recent study found that being lonelier led to less compassion experienced for people who were suffering, but more research was needed to also consider the influence of stigma and the tendency to view oneself as a victim on compassion.

Why was this study done?

This study was done to test again if loneliness is related to less compassion for those who are suffering, and if other variables might also inhibit compassion—specifically stigmatizing attitudes toward suffering groups and the tendency for interpersonal victimhood. The study was done while having participants (located in the United States) think of suffering groups of people at the time the study was done—specifically those who are addicted to opioids, those who are unemployed and affected by inflation, or those who do not have access to reproductive health care. This was an important choice as it tested the idea that loneliness was related to compassion using different suffering groups than from the previous study.

What did the researchers do and find?

In general, we found that loneliness, stigmatizing attitudes towards suffering social groups, and a sense of victimhood inhibited compassion for others; however, additional analyses showed that this depended on the reason for a person's suffering.

What do these findings mean?

Unlike prior research on loneliness and compassion, the current study showed that loneliness only inhibited compassion toward some suffering groups. Viewing those suffering as stigmatized was a more consistent influence on not feeling compassion for suffering groups.

Maintaining intimate relationships with others is a fundamental human need (Baumeister & Leary, 1995), yet many people experience loneliness as a result of this need not being met (Cigna, 2021). Although an obvious solution to experiencing loneliness would be creating new relationships and increasing intimacy within existing relationships, social scientists have argued that the experience of loneliness may also lead to an increase in self-focus and the diminished ability to determine friends from

foes (i.e., hypervigilance; Cacioppo & Cacioppo, 2018). Such behaviors and perceptions would be antithetical to engaging in prosocial behaviors that would increase human connection and potentially resolve one's loneliness. One particular prosocial behavior that could help maintain and deepen relationships is compassion—the experience of noticing another's suffering and being motivated to reduce their suffering (Miller, 2007). Indeed, a hallmark of intimate relationships is the provision of compassion and other forms of support when others are suffering (Baumeister & Leary, 1995).

Researchers recently showed that loneliness is negatively correlated with compassion for those in suffering groups (Floyd et al., 2022). That study provided a useful extension to the research on loneliness and compassion, specifically by looking at correlates of compassion felt for *suffering social groups* as opposed to compassion felt towards *specific individuals* (e.g., Goetz et al., 2010). Floyd and colleagues noted that their findings regarding loneliness and compassion *should* apply to various suffering social groups, and not only the groups tested in their study; however, to date, those findings have not been tested regarding additional suffering social groups.

Thus, the goal of the present study is to extend Floyd and colleagues' recent work to verify if loneliness correlates with compassion towards suffering social groups and we accomplish this by testing our hypotheses using different suffering social groups than the ones they used in their study. We also extend their research by testing whether additional factors affect compassion towards suffering social groups. Specifically, we test two additional variables that, like loneliness, may result in an inward self-focus and feelings of hypervigilance towards others: one's tendency for interpersonal victimhood and one's stigmatizing attitudes held toward suffering social groups. The forthcoming literature review begins by focusing on the relevant research on compassion before offering hypotheses regarding loneliness, victimhood, and stigmatizing attitudes as correlates of compassion.

Compassion as an Emotion and Prosocial Behavior

Compassion is distinct from similar cognitive and emotional experiences such as sympathy, empathy, and pity. Compassion involves not only noticing and connecting, but also experiencing a motivation to respond to others' suffering (Miller, 2007). That is, compassion is "the feeling that arises in witnessing another's suffering and that motivates a subsequent desire to help" (Goetz et al., 2010, p. 2). Thus, compassion encompasses the aspects of empathy in which one person experiences another person's emotional state (Fernandez & Zahavi, 2020) and extends beyond this to include a desire to act in such a way as to reduce that person's suffering.

Compassion is a prosocial behavior and an other-oriented state (Goetz et al., 2010). Although researchers have identified factors that influence compassion, the fundamental prerequisite for compassion is being in an other-oriented state. Miller's (2007) work on compassion supports this claim, noting that the first step within compassionate commu-

nication is noticing another's suffering. Thus, the forthcoming arguments rely on the idea that experiences, traits, and perceptions that create an inward turn (i.e., a self-focus) subsequently inhibit compassion for others. Specifically, we consider three variables that share common threads of an inward turn: loneliness, the tendency for interpersonal victimhood, and stigmatizing attitudes held towards suffering social groups.

Does Loneliness Inhibit Compassion Felt for Suffering Social Groups?

Loneliness is a psychological state in which one perceives the quantity and quality of one's relationships as deficient. Several large-scale studies have documented the prevalence of loneliness across cultures, suggesting loneliness is a pandemic. For example, one in nine British adults reported having zero close friends (Sherwood et al., 2014) and one in six students throughout 25 Latin American and Caribbean countries experience chronic loneliness and/or having zero close friends (Sauter et al., 2020). In the United States, over half of adults are experiencing loneliness, and 38% of U.S. adults do not have close personal relationships with other people (Cigna, 2021). Attempts to mitigate loneliness often involve generating new opportunities for social contact (e.g., Petryshen et al., 2001); however, the evolutionary theory of loneliness (ETL: Cacioppo & Cacioppo, 2018) posits that loneliness can result in a short-term increased self-focus and hypervigilance towards others. Each of these diminishes one's motivation to engage in prosocial behaviors such as compassion.

ETL argues that feelings of loneliness stem from feeling disconnected from or rejected by others (Cacioppo & Cacioppo, 2018). Feelings of social isolation can make an individual feel like they have a lack of protection and that others may be *against* them instead of *with* them (Goossens, 2018). This experience may influence an individual to turn inwards and perceive others through a hypervigilant lens (Meng et al., 2020). This may occur, in part, because loneliness increases an individual's likelihood to perceive negative social cues as threats, and lonely individuals have been shown to identify threats at a quicker pace than their non-lonely peers (Goossens, 2018).

As a result of this increased hypervigilance, lonely individuals are more likely to turn inward and unconsciously prioritize their own welfare (Cacioppo et al., 2017). Multiple studies have provided evidence of this phenomenon. In a series of experiments, social exclusion was inversely related to prosocial behaviors (Twenge et al., 2007), and another study reported lonely individuals being less attentive to their conversational partners (Jones et al., 1982). This increased self-focus inhibits a lonely individual's feelings of compassion, as compassion inherently involves noticing another's suffering and engaging in perspective-taking (Miller, 2007). In summary, ETL explains that despite the desire for connection, lonely individuals are likely to view others as a threat while increasing their own self-focus, subsequently diminishing the likelihood of engaging in prosocial behaviors such as compassion. Thus, the following is hypothesized:

H1: Loneliness is inversely related to compassion.

Is Compassion for Suffering Social Groups Inhibited By One's Sense of Victimhood?

Another goal of this study is to extend research that argues individuals expressing certain personality traits are less likely to experience compassion toward suffering social groups. In particular, the tendency for interpersonal victimhood (TIV: Gabay et al., 2020) is a trait that may diminish feelings of compassion towards suffering social groups. TIV is "an ongoing feeling that the self is a victim, which is generalized across many kinds of relationships" (Gabay et al., 2020, p. 1). Higher victimhood tendency individuals feel victimized more often, at a higher intensity, and for a longer duration than individuals who have a lower tendency for interpersonal victimhood.

TIV's four dimensions—need for recognition, moral elitism, rumination, and lack of empathy—share a common thread of inward self-focus. The *need for recognition* refers to victims' motivation to have their victimhood acknowledged. This may diminish compassion towards others as communicating compassion would refocus attention away from one's own suffering. *Moral elitism* refers to a victim's perception of impeccable morality of the self, and also entails the victim seeing the other side as immoral. Those who exhibit moral elitism may look towards others who suffer with disdain or blame, as opposed to compassion. *Rumination* also likely inhibits feelings of compassion, as those who ruminate focus their attention on their own distress and its possible causes, consequences, and solutions. That is, those who frequently ruminate may not give attention or much thought to others' suffering. Considering that compassion involves experiencing another's emotional state (i.e., empathy) and an additional desire to act in a way to reduce others' suffering (Fernandez & Zahavi, 2020), it is likely that the *lack of empathy* component of TIV would attenuate feelings of compassion for those who are suffering. In summary, across these four dimensions, those with a greater tendency for interpersonal victimhood focus on their own self-interests rather than on the suffering experienced by others. In their conceptualization of TIV, Gabay and colleagues (2020), explicitly note that being too focused on one's own circumstances and perceived victimization might lead to a lack of empathy, and as we hypothesize, compassion, because one pays little attention to other people's worries. Stated formally:

H2: The tendency for interpersonal victimhood is inversely related to compassion.

Do Lonely Victims Experience the Least Compassion Towards Suffering Social Groups?

Given that both loneliness and the tendency for interpersonal victimhood (TIV) involve an inward turn and increased attention to one's own interest, it is worth considering

if TIV interacts with loneliness and compassion for suffering social groups. As previously noted, one factor of TIV is the need for recognition. For a person to have their victimhood fully recognized, they need social connections. Lonely individuals may lack meaningful connections in life and therefore may have fewer opportunities to have their victimhood recognized. This could result in an increased desire for recognition of one's victimhood, which may inhibit the person from noticing others' suffering and need for compassion as they focus on their desire for being recognized.

Loneliness may contribute to an intensified experience of another TIV factor—lack of empathy—which would subsequently correlate with lower feelings of compassion. Prior research has shown that higher levels of empathy occur when people are closer to others spatially, emotionally, and temporally (Xu et al., 2009). Those who are lonely, therefore, may be particularly unempathetic towards others as they have fewer opportunities to interact with others or engage in other-oriented communication within meaningful relationships. Finally, significant correlations between loneliness and a third TIV factor—rumination—have been previously reported (e.g., Luttenbacher et al., 2021). In summary, the tendency for interpersonal victimhood and loneliness are similar but distinct experiences that may work in tandem to diminish feelings of compassion for those who are suffering. That is, the tendency for interpersonal victimhood may enhance the main effect of loneliness inhibiting compassion. Therefore, the following is hypothesized:

> H3: Lonelier individuals who have a greater tendency for interpersonal victimhood report less compassion for suffering social groups.

Do Stigmatizing Attitudes Held Toward Suffering Social Groups Affect Compassion Felt for the Group?

In addition to the social factor of loneliness and the personality trait of the tendency for interpersonal victimhood, a person's stigmatizing attitudes held toward suffering social groups may also inhibit compassion. That is, the negative attitudes or beliefs people hold about others' situations, behaviors, or characteristics, are the attitudes that create stigma toward a suffering social group.

Stigmatizing attitudes would likely inhibit a person's compassion for suffering social groups in a similar way that loneliness and the tendency for interpersonal victimhood would: by increasing an inward self-focus. One way this might be achieved is by maintaining social distance from suffering social groups. For example, Corrigan and colleagues (2009) found that individuals desired social distance from those who are stigmatized and reported a decreased desire to help members of stigmatized groups. In another example, primary care physicians reported greater stigmatizing attitudes towards patients with schizophrenia than those with depression and were less willing to treat patients with schizophrenia than those with depression (Lam et al., 2013). Likewise, studies have measured stigmatized attitudes using items that gauge desire for social

distance from members of a stigmatized group (e.g., Hirschfield & Piquero, 2010; Link et al., 1999). Together, this suggests a diminished motivation to engage in prosocial behaviors such as compassion when stigmatizing attitudes are held regarding a suffering social group. Therefore we hypothesize the following:

H4: Stigmatizing attitudes are inversely related to compassion.

Finally, given that loneliness, the tendency for interpersonal victimhood, and perceiving another group as stigmatized all are hypothesized to inhibit feelings of compassion due to experiencing an inward turn, it is possible that a three-way interaction effect may occur. Loneliness has been shown to result in short-term hypervigilance towards others and an increased self-focus (Cacioppo et al., 2017), and this may be intensified when an individual has a greater tendency for interpersonal victimhood—resulting in a greater concern for their own interests (Gabay et al., 2020). This lack of compassion could be further magnified if the suffering group in need of compassion is one that a person has stigmatizing attitudes toward. Someone who is lonely and has a greater tendency for victimhood is already unlikely to notice or respond to the suffering of others. If a lonely victim were to act compassionately, it is unlikely to occur toward a stigmatized group, as having stigmatizing attitudes toward a group is more likely to motivate creating social distance than approaching to provide help (Corrigan et al., 2009). That is, the main effect of loneliness on compassion may be enhanced by both the tendency for interpersonal victimhood and stigmatizing attitudes held toward a suffering social group. Therefore, we hypothesize the following:

H5: Lonelier individuals who have a greater tendency for interpersonal victimhood and stronger stigmatizing attitudes towards those in suffering social groups report the least compassion for suffering social groups.

Method

Recruitment and Study Procedures

All procedures were approved by the researchers' university's institutional review board and were pre-registered on the Open Science Framework (see Ray et al., 2022). All participants within this study identified as residing within the United States at the time of data collection.

Some participants were asked to respond to these items in regard to adults who are addicted to opioids. Opioid-related overdoses and addiction were still at epidemic levels during 2022 due in part to the overprescribing of painkillers (Neuman et al., 2019). The most recent data from the National Center for Health Statistics (NCHS) estimated over 80,000 Americans died of an opioid overdose in 2021—an increase from the

70,029 estimated opioid overdose deaths in 2020 (NCHS, 2022). Other participants were assigned to respond regarding women who do not have access to reproductive health care in their area. This social group was included because in June of 2022 the United States Supreme Court overturned Roe v. Wade, resulting in several state governments immediately enacting stricter laws regarding abortion (Bernstein, 2022). Lastly, some participants were asked to respond regarding unemployed adults who have been hurt by rising prices of goods and services (i.e., inflation). This social group was included because throughout 2022 the United States experienced the greatest level of inflation since 1981 (Winters, 2022), resulting in noteworthy price increases of several goods and services. A majority of Americans (56%) reported in a Gallup poll that rising prices were causing hardship (Jones, 2022). Of note, we do not expect the results of our hypothesis tests to depend on which group participants were randomly assigned to consider. We believe that the hypotheses regarding correlates of compassion will yield the same results across suffering social groups.

Participants

The sample for this study consisted of 627 U.S. adults who completed both the Time 1 and Time 2 surveys without failing an attention check. The sample was nationally representative based on U.S. Census data for sex, ethnicity, and age. Complete demographic information is provided in Table 1.

Table 1

Participant Demographics (N = 627)

Variable	*n* (%)[a]
Gender	
Woman	307 (49.0%)
Man	307 (49.0%)
Non-binary/third gender	4 (0.6%)
Transgender woman	3 (0.5%)
Transgender man	1 (0.2%)
Prefer not to answer/no answer	5 (0.8%)
Race	
White	490 (78.1%)
Black/African American	79 (12.6%)
Asian	43 (6.9%)
Latinx/Latino(a)	28 (4.5%)
Native American/Alaskan Native	5 (0.8%)
Prefer not to answer/no answer	5 (0.8%)

Variable	*n* (%)[a]
Hispanic	
Not Hispanic	556 (88.7%)
Hispanic	67 (10.7%)
No answer	4 (0.6%)
Education (Highest Level Completed)	
Did not complete high school	6 (1.0%)
High school or equivalent	79 (12.6%)
Some college but no degree	92 (14.7%)
Technical, trade, or vocational school	21 (3.3%)
Associate's degree	55 (8.8%)
Bachelor's degree	248 (39.6%)
Master's degree	95 (15.2%)
Doctoral degree (PhD)	13 (2.1%)
Professional degree (e.g., JD, MD, DDS)	18 (2.9%)
Romantic Relationship Status	
Single/not in a committed relationship	187 (29.8%)
Committed dating relationship	103 (16.4%)
Engaged	12 (1.9%)
Married	251 (40.0%)
Divorced/separated	57 (9.1%)
Widowed	12 (1.9%)
Prefer not to answer/no answer	5 (0.8%)
Sexual Orientation	
Straight	531 (84.7%)
Bisexual	51 (8.1%)
Gay/Lesbian	29 (4.6%)
Asexual	4 (0.6%)
Pansexual	1 (0.2%)
Queer	2 (0.3%)
Unlabeled/Questioning	1 (0.2%)
Prefer not to answer	8 (1.3%)
Employment Status[b]	
Full-time work	337 (53.7%)
Part-time work	106 (16.9%)
Unemployed	81 (12.9%)
Full-time student	16 (2.6%)
Part-time student	5 (0.8%)
Retired	68 (10.8%)
Paid disability	19 (3.0%)
Stay-at-home parent/homemaker	6 (1.0%)

Variable	*n* (%)[a]
Disability Status	
No reported disability/impairment	499 (79.6%)
Mental health impairment/disorder	54 (8.6%)
Mobility impairment	46 (7.3%)
Cognitive impairment/learning disability	22 (3.5%)
Other disability/impairment	21 (3.3%)
Sensory impairment (vision/hearing)	17 (2.7%)
Prefer not to answer/no answer	22 (3.5%)
Household Income (in $USD)	
$0	3 (0.5%)
$1–$9,999	27 (4.3%)
$10,000–$24,999	80 (12.8%)
$25,000–$49,999	150 (23.9%)
$50,000–$74,999	101 (16.1%)
$75,000–$99,999	103 (16.4%)
$100,000–$149,999	92 (14.7%)
$150,000 or more	60 (9.6%)
Prefer not to answer/no answer/unsure	11 (1.8%)

[a]Percentages for each demographic variable may not total to 100% either due to rounding error or because participants selected multiple response choices. [b]Full-time work = 35+ hours of work per week. Five participants (0.8%) reported being self-employed without specifying the number of hours worked per week.

Measures

Unless otherwise noted, all scales were measured using 9-point semantic differential scales. For each scale, an average score was calculated for each participant in which higher scores indicate a greater magnitude of the variable being measured (e.g., higher average compassion scores indicate greater feelings of compassion). Means, standard deviations, internal reliability scores, and intercorrelations among the study's variables are presented in Table 2 below.

Table 2

Intercorrelations, Means, Standard Deviations, and Internal Reliability Scores of the Study's Variables (N = 627)

Variable	1	2	3	4	5	6	7	*M*	*SD*	ω
1. Loneliness (T1)	—							2.27	.67	.92
2. Tendency for Interpersonal Victimhood (T1)	.35**	—						3.86	1.06	.93
3. Stigmatizing Attitudes (T2)	.13**	.12*	—					2.54	1.78	.87
4. Compassion (T2)	-.16**	-.03	-.56**	—				6.68	1.89	.92
5. Responsibility for Suffering (T2)	.02	.09*	.54**	-.50**	—			4.09	2.09	.90
6. Perceived Level of Suffering (T2)	-.05	.02	-.32**	.52**	-.42**	—		7.57	1.60	.83
7. People Known in Suffering Group (T2)	.04	.05	-.28**	.27**	-.20**	.11*	—	24.20	29.56	—
8. Affiliation with Suffering Group (T2)	.08	.10*	-.18**	.15**	-.17**	.05	.56**	15.88	30.04	—

Note. T1 = Time 1. T2 = Time 2. ω = the internal reliability statistic McDonald's *omega*. Reliability scores are not provided for variables that were measured using single items.
*$p < .01$. **$p < .001$ (two-tailed).

Loneliness

Loneliness was measured using the UCLA Loneliness Scale Version 3 (Russell, 1996). At the time of its development, this scale showed high internal reliability (α = .89–.94) and test-retest reliability over a 1-year period (r = .73) and is one of the most widely used measure of loneliness, with over 6,000 citations. The UCLA loneliness scale consists of 20 Likert-style items that measure a person's general propensity to experience loneliness. Example items include, "How often do you feel left out?" and "How often do you feel that you are no longer close to anyone?" Unlike other scales in this study that offered participants nine response options, this scale used response options ranging from 1 (*Never*) to 4 (*Often*).

Tendency for Interpersonal Victimhood

Gabay and colleagues' (2020) Tendency for Interpersonal Victimhood Scale was used to measure the tendency for interpersonal victimhood. The scale consists of 22 items across four factors: need for recognition, moral elitism, lack of empathy, and rumination. At the time of its development, the scale showed internal reliability across all 22 items (α = .90) and within each of the four factors (α = .85–.90). Through a series of studies, the scale's creators demonstrated construct, predictive, convergent, and discriminant validity (Gabay et al., 2020). Example items include, "It makes me angry when people don't believe I was hurt," "People demand a lot of me without expressing gratitude," and "It is hard for me to stop thinking about the injustice others have done to me."

Stigmatizing Attitudes

Stigmatizing attitudes held toward a suffering social group were measured using a modified version of four items from the World Psychiatric Association's Schizophrenia Open Door Project (World Psychiatric Association, 1999). These items were, "I would not

want to be in a social circle with someone from this group," "I would avoid interacting with a person from this group because of how others might view me," "I would feel embarrassed or ashamed if other people knew someone in my family belonged to this group," and one reverse-coded item: "I would be okay with making friends with someone from this group." Internal reliability scores were not reported by the World Psychiatric Organization; however, the scale's items in the present study showed high internal reliability (ω = .87).

Compassion

Compassion was measured using the Santa Clara Brief Compassion Scale (SCBCS; Hwang et al., 2008). The scale is composed of five items. Example items include, "I tend to feel compassion for people in this community, even if I do not know them," and "I feel bad for people in this community when they are in need." When developed, the SCBCS demonstrated good internal reliability (α = .90).

Potential Covariates

The extent to which a participant identifies with and knows people in the suffering social group to which they were assigned were each measured using items consisting of a slider with response options ranging from 0 to 100. Higher scores indicated identifying more strongly with the suffering social group or a greater extent of knowing people in the suffering social group. The social group's perceived level of suffering and perceived level of responsibility for their suffering were each measured using three items originally developed by Floyd and colleagues (2022).

Results

Preliminary analyses were conducted to determine if any variables should be included as covariates in the analyses. Although significant correlations between compassion and the potential covariates occurred, additional analyses showed all potential covariates to be acting as mediators or colliders, and as such, were not included as covariates in our regression analyses.

Of note, average compassion scores were significantly lower and stigmatizing attitudes scores were significantly higher for adults addicted to opioids compared to the other two suffering social groups. This aligns with prior research on stigmatizing attitudes towards those addicted to drugs (Corrigan et al., 2009). To address this, we first tested our hypotheses globally, by using all participants regardless of which suffering social group they were told to think about responding. Then, for each hypothesis, we conducted three additional exploratory analyses to see if each hypothesis was supported when tested using only the data for each of the three suffering social groups.

The forthcoming paragraphs provide additional details regarding our hypothesis tests, and the full results of our regression testing our hypotheses using all participants appear in Table 3. Because our additional exploratory analyses create a considerable number of findings, Table 4 presents a summary of our hypothesis tests and exploratory analyses.

Table 3

Hierarchical Regression Testing Main Effects and Interaction Effects of Loneliness, Tendency for Interpersonal Victimhood, and Stigmatizing Attitudes as Influencing Compassion for Suffering Social Groups (N = 627)

Step	Variable	B	SE B	β	ΔR^2
1	Loneliness	-.31	.10	-.11***	.322***
	TIV	.13	.06	.07*	
	Stigmatizing Attitudes	-.37	.04	-.35**	
2	Loneliness x TIV	.06	.08	.13	.001
3	Loneliness x Stigmatizing Attitudes	.03	.05	.08	< .001
4	Stigmatizing Attitudes x TIV	.08	.04	.34*	.005*
5	Loneliness x TIV x Stigmatizing Attitudes	-.07	.05	-.88	.002

Note. $F(7, 619) = 43.57$, $p < .001$, $R^2 = .33$, Adjusted $R^2 = .32$. TIV = Tendency for Interpersonal Victimhood.
*$p < .05$. **$p < .01$. ***$p < .001$.

Table 4

Summary of Hypothesis Tests and Exploratory Analyses of Variables Associated with Compassion for Suffering Social Groups

Predictor	All Participants (*N* = 627)	Adults Addicted to Opioids (*N* = 208)	Unemployed & Affected by Inflation (*N* = 209)	No Access to Reproductive Health (*N* = 210)
Loneliness (H1)	Supported	Supported	Supported	Not Supported
TIV (H2)	Supported	Supported	Not Supported	Not Supported
Loneliness x TIV (H3)	Not Supported	Not Supported	Not Supported	Not Supported
Stigmatizing Attitudes (H4)	Supported	Supported	Supported	Supported
Loneliness x TIV x Stigmatizing Attitudes (H5)	Not Supported	Not Supported	Not Supported	Not Supported

Note. TIV = Tendency for Interpersonal Victimhood. H3 stated a two-way interaction effect would occur between loneliness and the tendency for interpersonal victimhood. H5 stated a three-way interaction effect would occur between loneliness, tendency for interpersonal victimhood, and stigmatizing attitudes.

Hypothesis Tests and Exploratory Analyses

A hierarchical regression was used to test all five hypotheses. H1 stated that loneliness would be inversely related to compassion for suffering social groups. As hypothesized, loneliness inversely correlated with compassion for suffering social groups, β = -.11, p = .002. Additional analyses were conducted to determine if this association occurred when investigating each of the three suffering social groups. These analyses showed this inverse relationship only occurred for two groups: adults addicted to opioids (β = -.15, p = .010) and those who were unemployed and affected by inflation (β = -.16, p = .021). Loneliness was not inversely related to compassion for women who lacked access to reproductive health care. Thus, H1 is partially supported.

H2 stated that the tendency for interpersonal victimhood (TIV) would also be positively related to compassion, and the results using data from all participants supported this, β = .07, p = .043. However, additional analyses showed that this significant relationship only occurred for participants responding regarding adults who are addicted to opioids (β = .17, p = .002). TIV was not associated with compassion for those who were unemployed or who lacked access to reproductive health care. Therefore, H2 is partially supported.

H3 hypothesized that the inverse relationship between loneliness and the tendency for interpersonal victimhood would interact to influence compassion felt for those in suffering social groups. Results did not support this hypothesis, β = .13, p = .475. Additional exploratory analyses tested this hypothesis three additional times by dividing the data based on the suffering social group the participant was assigned to think about. These additional exploratory analyses were also nonsignificant. Therefore, H3 is not supported.

H4 asserted that stigmatizing attitudes held toward suffering social groups would be inversely related to compassion for the suffering social group. As expected, stigmatizing attitudes of the suffering social group significantly inversely correlated with compassion, β = -.55, p < .001. Moreover, additional exploratory analyses showed that stigmatizing attitudes inversely related to compassion when analyzing the data for each of the three suffering social groups independently. Stigmatizing attitudes were significantly, inversely related to compassion for adults addicted to opioids (β = -.65, p < .001), those who were unemployed (β = -.38, p < .001), and women who lacked access to reproductive health care (β = -.52, p < .001). H4 is fully supported.

Lastly, H5 hypothesized a three-way interaction effect in which the least compassion would be felt by those who were lonelier, perceived themselves as victims to a greater degree, and had the strongest stigmatizing attitudes towards suffering social groups. Results did not support this hypothesis, β = -.88, p = .141. Nonsignificant results also occurred for each of the three additional exploratory analyses testing this hypothesis with only the data for each of the three suffering social groups. H5 is not supported.

Finally, our hierarchical regression with all participants did return one significant, unhypothesized two-way interaction effect between tendency for interpersonal victim-

hood and stigmatizing attitudes, β = .34, p = .038. Additional exploratory analyses showed that this unhypothesized two-way interaction effect only occurred for those who were unemployed and affected by inflation (β = .71, p = .026) and not for those addicted to opioids or lacking access to reproductive health care.

Discussion

This study sought to extend recent research that showed loneliness inhibits feelings of compassion for suffering social groups (Floyd et al., 2022) by testing this association with a different set of suffering social groups. A secondary goal of this study was to test whether one's tendency for interpersonal victimhood (TIV) and stigmatizing attitudes held toward suffering social groups also inhibited compassion. To test the hypotheses, participants were randomly assigned to answer a series of questions regarding one of three social groups that were suffering at the time of data collection in late 2022: those who were addicted to opioids, those who were unemployed and affected by inflation, and those who did not have access to reproductive health care.

Results showed that loneliness, stigmatizing attitudes, and TIV significantly associated with less compassion for suffering social groups, but additional exploratory analyses showed that these main effects depended on the specific suffering social group. Although all three of these predictors were related to less compassion for those addicted to opioids, only loneliness and stigmatizing attitudes negatively associated with less compassion for those who were unemployed and affected by inflation, and only stigmatizing attitudes negatively associated with compassion for those lacking access to reproductive health care. Moreover, the hypothesized interaction effects of these predictors were nonsignificant. There was, however, one specific unhypothesized significant interaction in which stigmatizing attitudes and TIV interacted to inhibit compassion for those who were unemployed. The remainder of this discussion section considers these findings within the broader body of research on compassion and suffering.

As hypothesized, results showed that stigmatizing attitudes held toward suffering social groups inversely relate to compassion. This is consistent with previous research showing that stigmatization generates a desire for social distance from the stigmatized group (Corrigan et al., 2009). One reason for this behavior is that a person may view a member of a stigmatized group as a threat from which they must distance themselves. In such a case, they are likely to adopt a greater inward focus on their own safety and are unlikely to engage in prosocial behaviors like compassion. Further, perceptions of dangerousness and lack of connections to members of stigmatized groups have been shown to increase stigma (Hirschfield & Piquero, 2010), suggesting that a cycle of a lack of compassion, social distancing, and stigmatization may be at work.

As hypothesized, loneliness was found to be inversely related to compassion for suffering social groups. This finding is in alignment with recent research that showed a

cross-sectional correlation between loneliness and feelings of compassion for suffering social groups (Floyd et al., 2022). This finding also supports the propositions of the evolutionary theory of loneliness (ETL: Cacioppo & Cacioppo, 2018) that state that lonely people will experience an increased focus on their own self-interests and well-being (Cacioppo et al., 2017). This would explain a lack of compassion for others' suffering, especially for suffering social groups, as lonely people may focus more on their own suffering and priorities. ETL also states that an inward turn as a result of experiencing loneliness can lead to experiencing hypervigilance toward others (Meng et al., 2020). If lonely people are more likely to view others as a threat, it is unlikely that they will engage in prosocial behaviors such as compassion, as compassion is a motivator of approach behavior rather than an avoidant behavior. Interestingly, the association between loneliness and compassion was nonsignificant for those without access to reproductive health care. This could be the result of people not viewing those without access to health care as dangerous or as a threat, whereas research has well documented that those addicted to drugs are viewed as dangerous (e.g., Corrigan et al., 2009).

One's tendency for interpersonal victimhood was also tested as an inhibitor of compassion, and this hypothesis was supported. However, the additional exploratory analyses showed that TIV was only inhibiting compassion for those addicted to opioids and not the other suffering social groups. The four components of TIV may explain why this pattern of results occurred. For example, one of the four components of TIV is a lack of empathy, which we surmise translates to inhibited feelings of compassion for suffering social groups. This makes sense given that there is overlap between empathy and compassion (Fernandez & Zahavi, 2020). Another aspect of TIV is moral elitism. That is, those with greater TIV are more likely to view themselves as morally superior to others, and this might be especially so when asked to think about those addicted to opioids compared to those who are unemployed or without access to reproductive health care. Those battling addiction are often viewed as blameworthy and responsible for their addiction (Corrigan et al., 2009), whereas unemployment and whether someone has access to reproductive health care is likely construed as a matter of circumstances beyond the person's control. Thus, it is likely easier for someone to view themselves as morally superior to someone addicted to opioids as opposed to those who are unemployed or without access to reproductive health care.

The nonsignificant interaction effects that we hypothesized suggest that the relationships between loneliness, TIV, and stigmatizing attitudes are, in general, not dependent on one another. That is, those main effects occurred across the sample, regardless of the extent to which participants tend to view themselves as a victim. Likewise, the level of stigmatizing attitudes held toward a suffering social group appears to affect feelings of compassion independent of a person's tendency for interpersonal victimhood or loneliness. Results did, however, return one significant, unhypothesized two-way interaction in which TIV and stigmatizing attitudes resulted in low compassion for those who

were unemployed. One potential reason for this finding is that a victimhood mentality may exacerbate the degree of stigmatizing attitudes held toward others. For example, someone scoring as high TIV is characterized by lacking empathy. Those who cannot metaphorically put themselves in someone else's shoes would be more likely to develop strong, negative attitudes (i.e., stigmatizing attitudes) toward suffering social groups. Moreover, those with a victimhood tendency often believe they are morally superior to others (Gabay et al., 2020), and therefore may be more likely to hold stigmatizing attitudes toward suffering social groups as a way of perpetuating their belief of moral elitism.

Implications

The most consistent finding in our results is that stigmatizing attitudes toward suffering social groups inhibits compassion for those groups. Additionally, loneliness also inhibited compassion for two of the three groups studied and had previously been found to hinder compassion toward suffering social groups (Floyd et al., 2022). These findings create opportunities for counselors, social workers, health professionals, and others to potentially accomplish two beneficial goals: reducing stigmatizing attitudes toward suffering groups while also reducing loneliness, which has reached epidemic levels (Cigna, 2021). Specifically, we stress the importance of fostering opportunities for connection between lonely individuals and members of stigmatized groups, as a way to address both the loneliness pandemic while providing help to those who are suffering from various life circumstances.

Evidence from interventions and prior research support this idea. First, research has shown that inducing empathy towards those who are stigmatized led to more positive attitudes toward those individuals in the following days (e.g., Batson, et al., 1997). Second, a meta-analysis on the efficacy of loneliness interventions has shown that creating new opportunities for connection, providing social support, and cognitive behavioral therapy are all effective at addressing loneliness to some extent (Masi et al., 2011). In synthesis, lonely individuals should be encouraged by counselors, therapists, health professionals, and others in their lives to not only seek new connections but to do so through volunteerism with stigmatized social groups. Such actions would rise to the definition of compassion, as it would extend beyond empathy into performing actions that benefit others (Miller, 2007). Fostering opportunities to interact with and act compassionately toward stigmatized groups would not only benefit those who are stigmatized, but also benefit lonely individuals by providing new opportunities for connection with those they are helping and other volunteers (e.g., Pilisuk & Minkler, 1980). Moreover, research has shown that prosocial behaviors such as compassion are consistently linked to both mental and physical health benefits (Seppala et al., 2013).

Obviously, not all people will be motivated or feel ready to take such steps. Those who are particularly lonely, who have a strong tendency for interpersonal victimhood,

or who have strong stigmatizing attitudes toward certain groups, might benefit first from counseling or taking part in brief compassion-focused interventions. Prior research has shown that even a short-term compassion training can increase prosocial behavior (Leiberg et al., 2011) and therapeutic approaches such as cognitive behavioral therapy have been shown to be particularly effective in addressing loneliness (Masi et al., 2011). These could be effective tactics in reducing loneliness, and could act as a foundation for future compassionate behaviors such as volunteering with stigmatized groups.

Limitations and Future Directions

This study has limitations that are worth noting that can also serve as future research directions. First, this study is limited to measuring feelings of compassion towards suffering groups as opposed to enacted behaviors of compassion that might be more consequential to those who are suffering. Thus, in the present study, experiencing feelings of compassion may not always translate to actual compassionate behaviors toward those who are suffering. Future research should move beyond survey designs to track actual compassionate behaviors performed for those who are in suffering social groups over time. Such efforts could include developing and/or testing interventions aimed at reducing loneliness and changing stigmatizing attitudes held toward suffering social groups. Prior loneliness interventions have aimed to address loneliness by providing new opportunities for social contact (Petryshen et al., 2001), so an intervention involving volunteerism with those in a stigmatized population could address loneliness by providing a chance for social connection while also benefiting those who are suffering.

Additionally, the present study tested trait-level variables (e.g., the tendency for interpersonal victimhood) as inhibitors of compassion and did not consider state-level variables that may affect compassion, such as mood. For example, loneliness was measured using a trait-level measurement, and future studies should investigate whether intermittent, state-levels of loneliness may affect feelings of compassion and the intention to behave compassionately toward those who are suffering. Even a typically compassionate person may forgo communicating compassion to someone from a suffering social group at a time when they happen to be in a negative mood or experiencing intermittent loneliness.

We also note that stigma is a multifaceted concept whose conceptualization and definition have been contested over decades of research. This study specifically focused on stigmatizing attitudes; however, future research can investigate other forms of stigma (e.g., courtesy stigma) or other aspects of stigma, such as the roles of status loss and power in creating and maintaining stigma regarding specific groups. Similarly, we note that our descriptions of the three suffering social groups may have influenced how people responded regarding each group. For example, participants responding regarding "adults addicted to opioids" may elicit different stereotypes and emotional reactions than "women who do not have access to reproductive health care in their area." Future

research can utilize the stereotype content model and the BIAS map (Cuddy et al., 2008) to further explore how group-specific stereotypes can explain whether stigma inhibits compassion. However, it is worth noting that stigmatizing attitudes was the only independent variable that consistently inhibited compassion in both our hypothesis tests and our exploratory analyses that tested our hypotheses with each specific suffering social group.

Conclusion

In summary, this study added to the conversation regarding the experiences, perceptions, and attitudes that correlate with inhibited feelings of compassion towards those in suffering social groups. Results showed that loneliness, stigmatizing attitudes, and the tendency for interpersonal victimhood inhibited compassion for suffering social groups; however, additional analyses showed that these effects depended on the nature of the suffering social group. Future studies should seek to understand the specific characteristics of suffering social groups that account for variations in the amount of compassion received from others.

References

Funding: The authors have no funding to report.

Acknowledgments: The authors have no additional (i.e., non-financial) support to report.

Competing Interests: The authors have declared that no competing interests exist.

Ethics Statement: Human participants were involved in this study. All participants provided informed consent. All procedures were approved by the Institutional Review Board at Louisiana State University.

Data Availability: The dataset for this study is not publicly available.

Supplementary Materials

The authors have provided their Open Science Framework study registration as supplementary material. This pre-registration includes study information, hypotheses, a design plan and sampling plan, variables, an analysis plan, and one update made to the analysis plan after collecting data (see Ray et al., 2022).

Index of Supplementary Materials

Ray, C., Duede, L. A., Wang, N. O., Garza, B., & Burns, J. (2022). *Loneliness, the tendency for interpersonal victimhood, and stigma predict compassion for suffering social groups* [Pre-Registration]. OSF Registries. https://doi.org/10.17605/OSF.IO/Z2JKV

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