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Lifespan perspective on self-compassion: Insights from age-groups and gender comparisons

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ABSTRACT



Developmental stages present challenges that prepare the individual for new roles. Self-compassion may be a protective factor across this process. The present study aims to: (1) compare self-compassion scores in adolescence, young adulthood, adulthood, and older adulthood using a cross-sectional design and a continuous multigenerational sample; (2) study gender comparisons across age-groups; and (3) study gender comparisons within each age-group. The sample included 242 adolescents, 239 young adults, 208 adults, and 198 older adults. Participants answered the Self-Compassion Scale. Whereas Overall Self-compassion was similar for all age-groups, differences were found in Self-judgment, Common Humanity, Mindfulness, and Over-identification. Comparisons across age-groups for Isolation and Over-identification suggested that, as they age, female individuals develop self-compassion, whereas male individuals may struggle to be self-compassionate. Comparisons within age-groups suggested that, particularly, female adolescents and male adults may struggle the most to be self-compassionate. These findings may inform targeting specific needs, according to age and gender.


Introduction

Self-compassion is a psychological construct that has garnered great research interest in recent decades, though it has been suggested to differ across age-groups. Across the human lifespan, distinct age-groups engage in diverse developmental tasks requiring self-compassion, such as the exploring of new roles associated with younger age-groups and the mastering of said roles associated with older age-groups. Likewise, and for distinct age-groups, it has been suggested that self-compassion may differ according to gender. The current study intends to explore the relationships among self-compassion (overall and components), age, and gender by using a cross-sectional research design and a continuous multigenerational sample.

Neff (2003a, 2003b) defined self-compassion as an adaptive relationship with the self during challenging circumstances, by being understanding and kind instead of self-critical. Self-compassion entails recognizing that mistakes are inherent to the human

condition, rather than a signal of personal inadequacy, which allows us to be mindfully aware of unpleasant sentiments and cognitions without avoiding, suppressing, or overidentifying the self with them. In her conceptualization, Neff (2003a) also emphasized that being self-compassionate does not equal being self-centered. In fact, this sense of compassion is extended to the self not because one is superior or more deserving than others, rather, because the individual is able to recognize their interconnectedness and equality in relation to others. Similarly, being self-compassionate does not imply passivity toward shortcomings observed in the self. Whereas self-compassion entails that one does not harshly criticize themselves for their mistakes and failures, this does not mean that these failings go unnoticed or unchanged. In fact, in fostering gentleness and understanding toward difficult circumstances and experiences, a self-compassionate mindset allows for a motivation for personal growth and improvement in an adaptive and healthy manner.

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Neff (2003a, 2003b) further operationalized self-compassion as based on interrelated components: Self-kindness, Common Humanity, and Mindfulness. Self-kindness represents being able to be gentle and soothing toward the self when facing difficulties. Common Humanity entails having a broader perspective of one's flaws and shortcomings by understanding that every human undergoes negative experiences. Mindfulness represents the awareness of one's thoughts, experiences, and feelings in the present moment. These positive components of self-compassion co-exist with negative components: Self-judgment, Isolation, and Over-identification. Self-judgment, as opposed to Self-kindness, portrays a critical mindset where the self is perceived as not deserving of kindness or forgiveness. Isolation, as opposed to Common Humanity, entails a feeling of disconnectedness and forgetting that others also experience difficulties. Over-identification, as opposed to Mindfulness, configures a state of becoming so consumed by intense emotional reactions that painful feelings and thoughts may be avoided or repressed. According to Neff (2003a, 2003b), the six components are not mutually exclusive and having low scores in one component (e.g., Self-judgment) does not necessarily mean having high scores in the complementary other (e.g., Self-kindness).

Self-compassion has been associated with positive psychological constructs (e.g., well-being, positive affect, life satisfaction) and may be a protective factor in face of distress and mental health problems (Han & Kim, 2023; Macbeth & Gumley, 2012; Zessin et al., 2015), as well as physical health and health-related conditions (Kılıç et al., 2021; Phillips & Hine, 2021). The benefits of fostering self-compassion have been found in different settings (e.g., work-related well-being, Kotera & Van Gordon, 2021; mental health professionals, Crego et al., 2022) and in relation to diverse mental health conditions (e.g., suicidal thoughts and behaviors and non-suicidal self-injury, Suh & Jeong, 2021; eating and body image concerns, Turk & Waller, 2020). Likewise, self-compassion has been suggested as a mental health protection factor in adolescents (Marsh et al., 2018), adults (Macbeth & Gumley, 2012; Zessin et al., 2015), and older adults (Tavares et al., 2023). Hence, self-compassion seems to be a stable psychological resource, associated with improved mental health outcomes over time (Marshall et al., 2015; Stolow et al., 2016).

Furthermore, the literature has demonstrated that self-compassion is a malleable construct susceptible to being taught/learned and trained, and that (self)compassion-based interventions generally foster positive

outcomes. Namely, Kirby et al. (2017), in their meta-analysis of compassion-based interventions, synthesized data from 21 randomized controlled trials (RCTs) and 1285 participants. Their results demonstrated that such interventions were useful in fostering both compassion and self-compassion, reducing suffering (i.e., depression, anxiety, and psychological distress), and increasing well-being. Importantly, when active control comparisons were included in the analyses, the effect sizes slightly decreased but they all remained as statistically significant moderate effect sizes. Similarly, Ferrari et al. (2019) conducted a meta-analysis of RCTs regarding self-compassion interventions and psychosocial outcomes, and synthesized data from 27 studies and 1480 participants. Results showed that such interventions produced a moderate and significant improvement in self-compassion scores, as well as significant improvements across several outcomes (e.g., eating behavior, rumination, self-criticism, life satisfaction) when compared with control interventions. Furthermore, self-compassion-based interventions resulted in significant benefits across community, university, and clinical populations.

Considering that the aforementioned findings have been demonstrated in samples of different ages, we argue that the relationship between age and self-compassion can be further contextualized within a lifespan developmental perspective. In such framework, development is a process of systematic changes and continuities occurring within a person from conception to death, and it entails multiple interacting domains of functioning (e.g., psychosocial, physical, and cognitive). Changes in one domain, be it gains or losses, have implications in other domains (Overton, 2015). A related concept is that of developmental tasks, as proposed by Havighurst (1972) and later extended and adapted (e.g., Hutteman et al., 2014; Schleyer-Lindenmann, 2006). Developmental tasks entail that humans must acquire certain competencies during specific phases of their development (cf. Havighurst (1972) for a review). These normative tasks are based on societal expectations regarding milestones that should be reached at a particular life stage (McCormick et al., 2011), even if those stages of human development change and evolve along with the *zeitgeist* and societies themselves (cf. Hutteman et al. (2014) for a discussion).

Because self-compassion entails treating the self with kindness and understanding during difficult times, as well as to strive for personal growth and improvement (Neff, 2003a, 2003b), it may, therefore, be an important psychological resource to help

individuals face the challenges inherent to these developmental tasks. Specifically, the period of prolonged exploration during adolescence and emerging adulthood is mainly associated with developmental tasks regarding the establishment of new roles (Havighurst, 1972). A self-kind attitude may help adolescents and young adults to keep a positive relationship with themselves as they, for example, develop close relationships with peers and explore their identity and professional place in society. Then, the focus of developmental tasks during middle adulthood shifts to the maintenance and mastery of these roles (Havighurst, 1972). A mindful attitude may help adults manage stress more effectively as they, for example, cope with the challenges of parenthood and of an evolving professional occupation. Finally, the major developmental tasks of older adulthood relate to adjusting to losses at different levels (Havighurst, 1972). A sense of common humanity may help older adults as they face negative life events normatively associated with the aging process (e.g., bereavement of a spouse or friends, diagnosis of new health conditions or incapacities), namely in understanding that such difficulties do not arise from personal shortcomings but, rather, are universal and inherent to the human condition.

As such, given the unique developmental tasks associated with each life stage, it seems plausible that differences in self-compassion may also be expected. Indeed, some studies suggest that self-compassion is positively correlated with age (Hwang et al., 2016; Murn & Steele, 2020; Neff & Vonk, 2009; Wren et al., 2012). Allen et al. (2012) found that self-compassion was higher in older adults compared to college students, and Homan (2016) reported an increase in self-compassion with age in a multigenerational sample. Furthermore, using a sample across the adult lifespan (age range 27–101 years) and a longitudinal design (7.5 years), Lee et al. (2021) reported that self-compassion scores showed an inverse U-shaped relationship with age and were highest around age 77 years. Conversely, Phillips and Ferguson (2013), in a sample of 185 participants ranged in age from 65 to 92 years, reported a weak and non-significant correlation between self-compassion and age. Considering the self-compassion components, the current evidence is scarce. Murn and Steele (2020) have shown that younger participants, compared to older ones, scored lower on the Common Humanity and Mindfulness components, whereas Karakasidou et al. (2020) have shown that younger participants, compared to older ones, scored higher in Over-identification. Notwithstanding, more research that investigates the

relationship between age and self-compassion will be useful. Namely, to clarify the somewhat mixed findings regarding differences in overall self-compassion in distinct age-groups, as well as to provide more information about age-related differences in the self-compassion components. We believe that a human lifespan approach, studying these variables across diverse developmental stages by using a continuous multigenerational sample, will expand the presently available literature.

Gender seems to also impact self-compassion. Murn and Steele (2020) reported that men scored lower in Common Humanity, whereas women scored higher in Over-identification. No gender differences emerged for the other components nor for overall self-compassion. Karakasidou et al. (2020), however, reported that men scored significantly higher than women in Isolation and Over-identification. An explanation for this disparity in results may stem from the interaction between gender and age and, in fact, some evidence suggests that gender differences may vary across different stages of the human lifespan. In their meta-analysis, Yarnell et al. (2015) showed that, despite the great similarity in their responses, men reported slightly higher self-compassion than women. Age was negatively associated with the magnitude of effect size for gender, and the gender gap in self-compassion decreased among older samples. These results were interpreted as gender roles becoming less extreme with age, and gender differences in self-compassion becoming less notorious. Likewise, Karakasidou et al. (2020), investigating the relationships between self-compassion, gender, and age-groups (defined in three groups: 18–30 years old, 31–49 years, and 50–72 years old), showed that the younger male participants reported higher Over-identification compared to the older male participants. Such pattern was not found for female participants.

Additionally, gender differences may also differ within a same age-group. In adolescents, Bluth and Blanton (2015) suggested that gender and age differences in self-compassion may emerge between middle and high school. In that study, female middle school students and male students from both middle and high school reported significantly higher self-compassion than high school female students. Bluth et al. (2017) also demonstrated that self-compassion scores in male participants were similar across all adolescent age-groups studied. In contrast, self-compassion scores were the lowest for older female adolescents. Finally, Karakasidou et al. (2020) reported that, in the 18–30 years old age-group, male participants scored

significantly higher in Over-identification compared to female participants.

More research will be useful to understand if differences in self-compassion (overall and components) exist in distinct age-groups where, in turn, individuals are engaging in distinct developmental tasks. In other words, though gender differences may exist in self-compassion, some mixed findings that have been reported (e.g., Karakasidou et al., 2020; Murn & Steele, 2020) may stem from potential interactions between gender and age-groups. However, the study of such interaction effects has received less attention in the presently available literature. In particular, more research is needed to understand gender differences in self-compassion across and within distinct age-groups. Whereas Karakasidou et al. (2020) have already provided some evidence, their age intervals were broad and, for example, the 18–30 years old age-group included both late adolescent and young adult participants, not allowing for specific conclusions for each of these developmental stages. Additionally, understanding whether there are group differences in self-compassion has implications from a clinical perspective. For example, if it is demonstrated that gender differences in self-compassion are found in certain age-groups but not others, this may warrant an emphasis on raising self-compassion in specific populations to foster well-being.

Research objectives

The present study aims to investigate the relationships among self-compassion, age, and gender by using a cross-sectional research design and a continuous multigenerational sample. Next, we present three specific objectives and their related hypotheses.

Age-group comparisons

The first objective is to study the differences in Overall Self-compassion and each of its components across human development. To this purpose, we compared self-compassion scores in four continuous developmental stages: adolescence (12–19 years old), young adulthood (20–24 years old), adulthood (25–59 years old), and older adulthood (≥ 60 years old). This choice was based on the developmental stages originally proposed by Havighurst (1972) and on the age classification proposed by the World Health Organization (World Health Organization, 2022a, 2022b, 2022c). Such categorization has the advantage of having clearly defined groups that, in turn, are

associated with specific developmental tasks, allowing for comparisons founded on a comprehensive theoretical background. Additionally, the present study builds on previous findings (Karakasidou et al., 2020) by considering more, and more specific, age-groups and larger age intervals in the youngest and oldest groups.

Based on previous findings (Hwang et al., 2016; Murn & Steele 2020; Neff & Vonk, 2009; Wren et al., 2012), our first hypothesis (H1) was that Overall Self-compassion would be lowest for adolescents, increase for young adults and adults, and be highest for older adults. Based on the findings by Murn and Steele (2020), our second hypothesis (H2) was that a similar pattern of results would be found for Common Humanity and Mindfulness. Based on the findings by Karakasidou et al. (2020), our third hypothesis (H3) was that Over-identification would be highest for adolescents, decrease for young adults and adults, and be lowest for older adults. Given the scarce previous literature, we did not establish a *priori* hypotheses for the other components.

Gender comparisons across age-groups

The second objective of this study investigates the role of gender in the relationship between age and self-compassion (overall and its components). Specifically, we studied gender comparisons across the four age-groups. This was an exploratory objective but, given the literature on which the first objective is based, H4 was that, for both male and female participants, Overall Self-compassion, Common Humanity, and Mindfulness would increase from adolescence toward older adulthood. Additionally, based on the findings by Karakasidou et al. (2020), H5 was that, for male participants only, Over-identification would decrease from adolescence toward older adulthood. We did not establish a *priori* hypotheses for the other components.

Gender comparisons within age-groups

The third objective is to study gender comparisons within each age-group for self-compassion and each of its components. Based on the findings by Yarnell et al. (2015), H6 was that for male participants, compared to female participants, would report higher Overall Self-compassion in every age-group except older adults. Based on the findings by Bluth and Blanton (2015) and Bluth et al. (2017), H7 was that female adolescents would report the lowest Overall Self-compassion. Additionally, based on the findings

by Karakasidou et al. (2020), H8 was that adolescent and young adult male participants would report higher Over-identification than female participants. Finally, we did not establish *a priori* hypotheses for the other components.

Materials and methods

Participants and procedure

The adolescent sample was collected from middle and high schools. Ethical approval was obtained from the Ministry of Education and the National Commission for Data Protection of Portugal. Additionally, the study was authorized by the schools' Head Teacher and parents gave written informed consent for their child's participation. The young adult and adult samples were collected from university and community settings. The older adult sample was recruited from institutions such as Universities for the Third Age and recreative centers. Permissions by the Ethics Committees from two Portuguese universities were obtained to conduct the study in the young adult, adult, and older adult populations. For all age-groups, participants were given an informed consent form containing information regarding the project and their rights as participants. As well, for all ages groups, participants were considered eligible only if they had the capacity to give informed consent (e.g., no formal diagnosis of neurological and psychiatric disorders).

Please check Table 1 for the sample's sociodemographic information.

Preliminary analyses showed that there were significant differences in the proportion of male and female participants according to age-group, $X^2(3) = 20.10$, $p < .001$, and the standardized residual values showed that this sample contained significantly fewer male adults (STD residual = -2.0) and significantly more male older adults (STD residual = 2.6) than statistically expected.

Measures

Age and gender were assessed through a sociodemographic questionnaire.

Self-compassion

The Self-Compassion Scale (SCS; Neff, 2003b) contains 26 items organized into 6 subscales representing the self-compassion components: Self-kindness (e.g., "I try to be loving towards myself when I'm feeling emotional pain"), Self-judgement (e.g., "I'm disapproving and judgmental about my own flaws and inadequacies"), Common Humanity ("When things are going badly for me, I see the difficulties as part of life that everyone goes through"), Isolation ("When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world"), Mindfulness ("When something upsets me I try to keep my emotions in balance"), and Over-identification ("When I'm feeling down I tend to obsess and fixate on everything that's wrong"). The items are rated on a 5-point Likert-format scale, varying from 1 (*Almost never*) to 5 (*Almost always*).

The original study (Neff, 2003b) demonstrated the adequacy of using the SCS to assess both overall self-compassion and its individual components. Adequate internal consistency for the total score ($\alpha = .92$) and for the subscales ($\alpha = .75-.81$), as well as high test-retest reliability over three weeks for the total score ($r = .93$) and the subscales ($r = .80-.88$), have also been shown. The SCS has also showed adequate construct validity in relation to social desirability, self-criticism, social connectedness, and emotional intelligence (Neff, 2003b).

As for the Portuguese version, the use of the individual components and/or of the SCS total score was also supported (Castilho et al., 2015; Castilho & Pinto-Gouveia, 2011). Likewise, adequate values were reported for internal consistency of the total scale ($\alpha = .89$) and the subscales ($\alpha = .73-.84$), as well as adequate test-retest reliability over four weeks for the total score ($r = .78$). Adequate construct validity was

Table 1. Sociodemographic characteristics of participants.

	Total												Gender									
	Total						Male						Female									
	<i>n</i>	% ^a	% ^b	% ^c	<i>M</i>	<i>SD</i>	Range	<i>n</i>	% ^a	% ^b	% ^c	<i>M</i>	<i>SD</i>	Range	<i>n</i>	% ^a	% ^b	% ^c	<i>M</i>	<i>SD</i>	Range	
Total	887	100.0	100.0	100.0	34.95	22.40	12–92	296	100.0	33.4	33.4	37.83	25.21	12–92	591	100.0	66.6	66.6	33.51	20.73	12–89	
Age-group																						
Adolescents	242	27.3	100.0	27.3	15.70	2.22	12–19	89	30.1	36.8	10.0	15.39	2.28	12–19	153	25.9	63.2	17.2	15.88	2.17	12–19	
Young adults	239	26.9	100.0	26.9	21.38	1.31	20–24	67	22.6	28.0	7.6	21.58	1.38	20–24	172	29.1	72.0	19.4	21.30	1.28	20–24	
Adults	208	23.4	100.0	23.4	36.71	7.61	25–57	53	17.9	25.5	6.0	35.96	7.56	25–57	155	26.2	74.5	17.5	36.96	7.63	25–57	
Older adults	198	22.3	100.0	22.3	73.01	7.14	60–92	87	29.4	43.9	9.8	74.44	7.41	60–92	111	18.8	56.1	12.5	71.89	6.74	60–89	

Note. %^a = percentage within Gender; %^b = percentage within Age-group; %^c = percentage of Total. Mean, standard deviation, and range values refer to age in years.

reported in relation to social comparison, optimism, depression, anxiety, and stress (Castilho & Pinto-Gouveia, 2011).

In the adolescent sample, we used the Portuguese version of the SCS adapted for this age-group by Cunha et al. (2016). This version has good reliability for the total score ($\alpha = .88$) and for the subscales ($\alpha = .70-.79$). Results also confirmed the six-factor and second-order structures of the SCS, and evidence of construct validity was obtained in relation to emotional memories of warmth and safeness and psychopathological symptoms (Cunha et al., 2016).

Finally, in the present study, reliability analyses showed adequate results with a value of Cronbach's alpha = .92 for the total scale and values ranging from .77 to .85 for the subscales.

Statistical analyses

G*Power 3.1 (Faul et al., 2009) was used to perform an *a priori* statistical power analysis for sample size estimation. With an alpha = .05 and power = .95, the projected total sample size needed for an effect size = .25 is approximately $n = 279$. Based on this analysis, we decided to recruit a total sample of no less than 300 participants, and no less than 75 participants per age-group.

We used SPSS (version 26.0) for data analysis, and we conducted two-way independent ANOVAs to study the differences in self-compassion (overall and components) in relation to age-group (group 1 = adolescents; group 2 = young adults; group 3 = adults; group 4 = older adults) and gender (group 1 = male; group 2 = female). We considered this statistical procedure adequate to achieve the present study's objectives, given the interest in exploring the main effect of age-group on self-compassion and its components and in subsequently exploring the interactions between age-groups and gender (Field, 2013). We used the Kolmogorov-Smirnov test to assess the univariate normality assumption, the values of skewness (Sk) and kurtosis (Ku) according to the recommendations by Kline (2005; $Sk < 3$ and $Ku < 8$) to assess the multivariate normality assumption, and Levene's test to assess the homogeneity of variance assumption. The level of significance accepted was $p < .05$, and we interpreted effect sizes based on the recommendations by Cohen (1988; $\eta^2 > 0.01$ indicates a small effect; $\eta^2 > 0.06$ indicates a medium effect; $\eta^2 > 0.14$ indicates a large effect).

Results

Assumptions

The Kolmogorov-Smirnov test indicated that the scores' distribution differed from normal for all groups. This was expected, given the large sample size (Field, 2013). The skewness and kurtosis values indicated that the scores' distribution was approximately normal for all groups. Levene's test indicated that the homogeneity of variances was violated for Self-Judgment, $F(7, 878) = 2.23$, $p = .030$, and Common Humanity, $F(7, 878) = 2.38$, $p = .020$. Based on Field (2013), we used the Bonferroni *post-hoc* test whenever pertinent given its capacity to control the Type I error rate.

Age-group comparisons

Figures 1–7 include a graphic representation of all age-group comparisons. The mean and standard deviation values for self-compassion and its components, according to age-group, can be found in [Online Supplementary Material 1](#).

There was no significant main effect of age-group for Overall Self-compassion, Self-kindness, and Isolation. There was a significant main effect of age-group for: Self-judgment, $F(3, 878) = 3.39$, $p = .018$, $\eta_p^2 = .01$; Common Humanity, $F(3, 878) = 7.74$, $p < .001$, $\eta_p^2 = .03$; Mindfulness, $F(3, 879) = 7.12$, $p < .001$, $\eta_p^2 = .02$; and Over-identification, $F(3, 879) = 3.00$, $p = .030$, $\eta_p^2 = .01$. According to Cohen (1988), all effect sizes were considered small. Because *post-hoc* analyses were not able to detect group differences for Self-judgment and Over-identification, we identified plausible differences based on descriptive values only. Statistically significant results are summarized next, according to the component. The full summary of values for *F* ratio, statistical significance, and effect size is available in [Online Supplementary Material 1](#).

Self-judgment. Based on [Online Supplementary Material 1](#), adults and older adults may have reported significantly higher Self-judgment compared to adolescents.

Common Humanity. Adults and older adults reported significantly higher Common Humanity compared to adolescents (both $p < .001$), and there was a trend for older adults to report higher Common Humanity compared to young adults ($p = .052$).

Mindfulness. Older adults reported significantly higher Mindfulness compared to adolescents and to young adults (both $p < .001$).

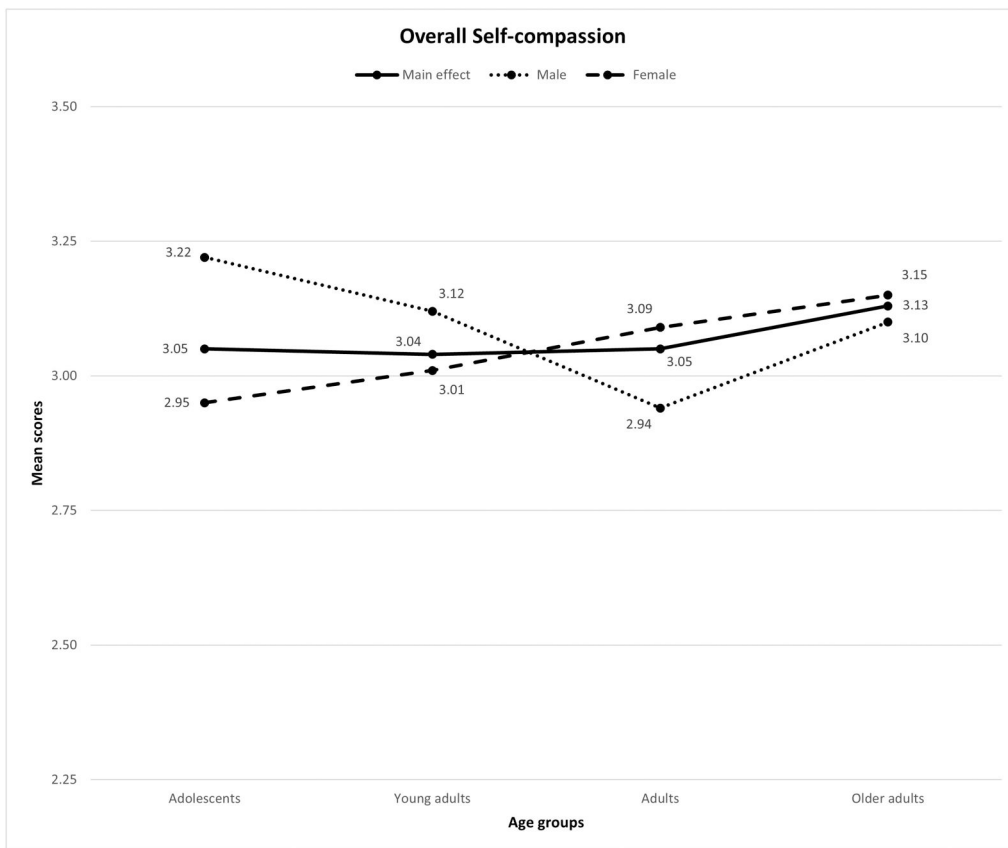


Figure 1. Graphic representation of the main effect and interaction analyses for overall self-compassion.

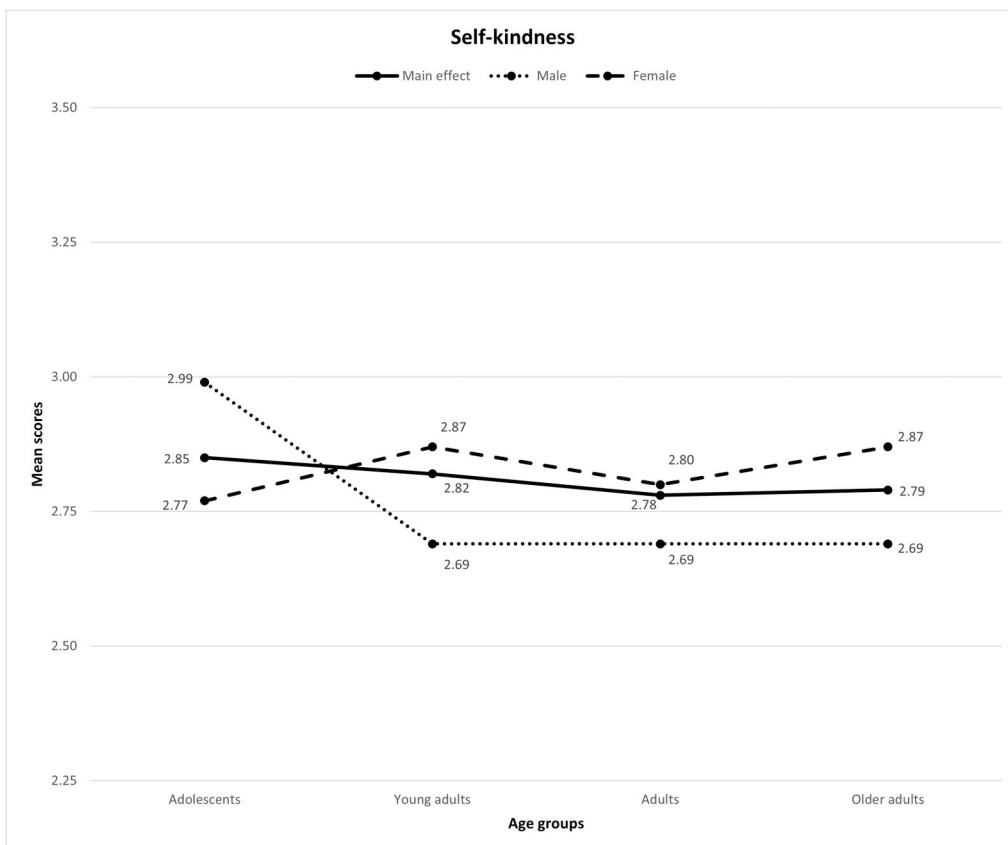


Figure 2. Graphic representation of the main effect and interaction analyses for self-kindness.

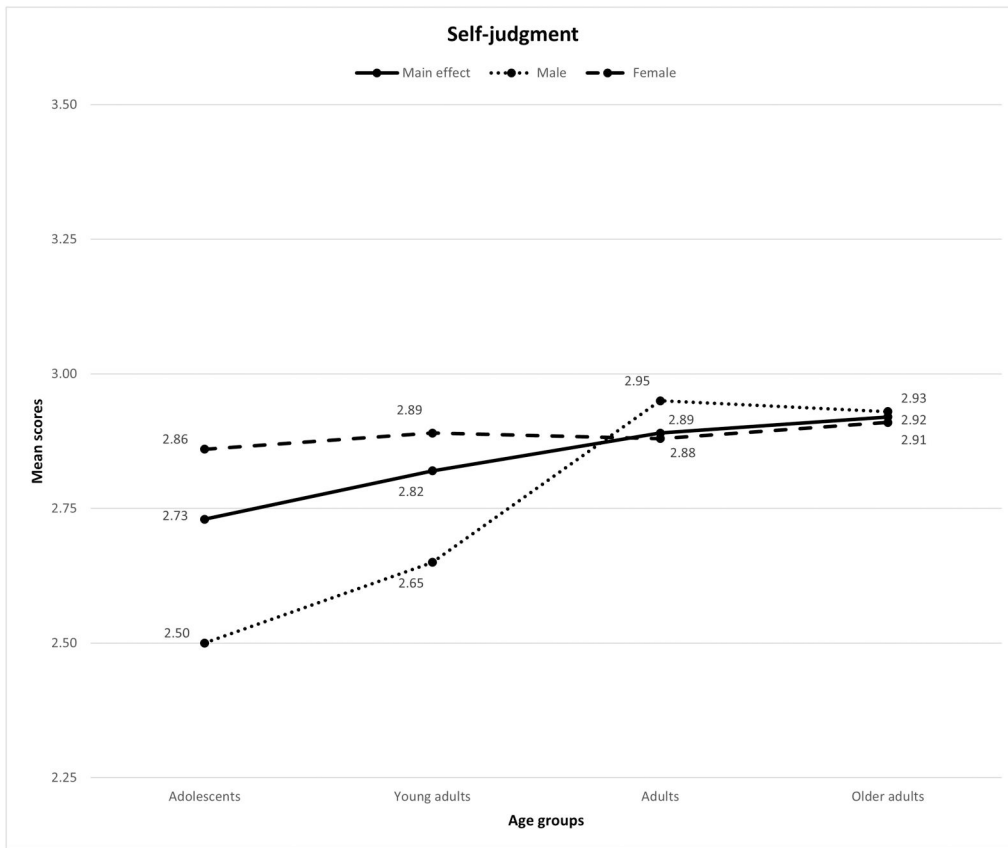


Figure 3. Graphic representation of the main effect and interaction analyses for self-judgment.

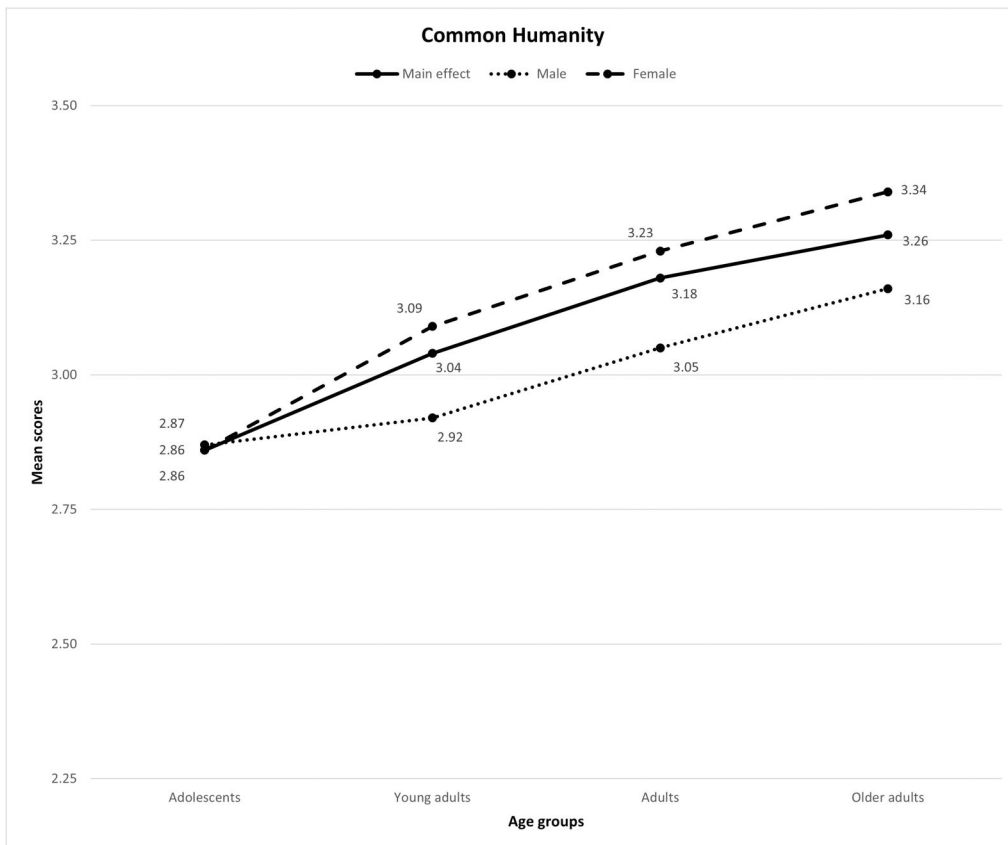


Figure 4. Graphic representation of the main effect and interaction analyses for common humanity.

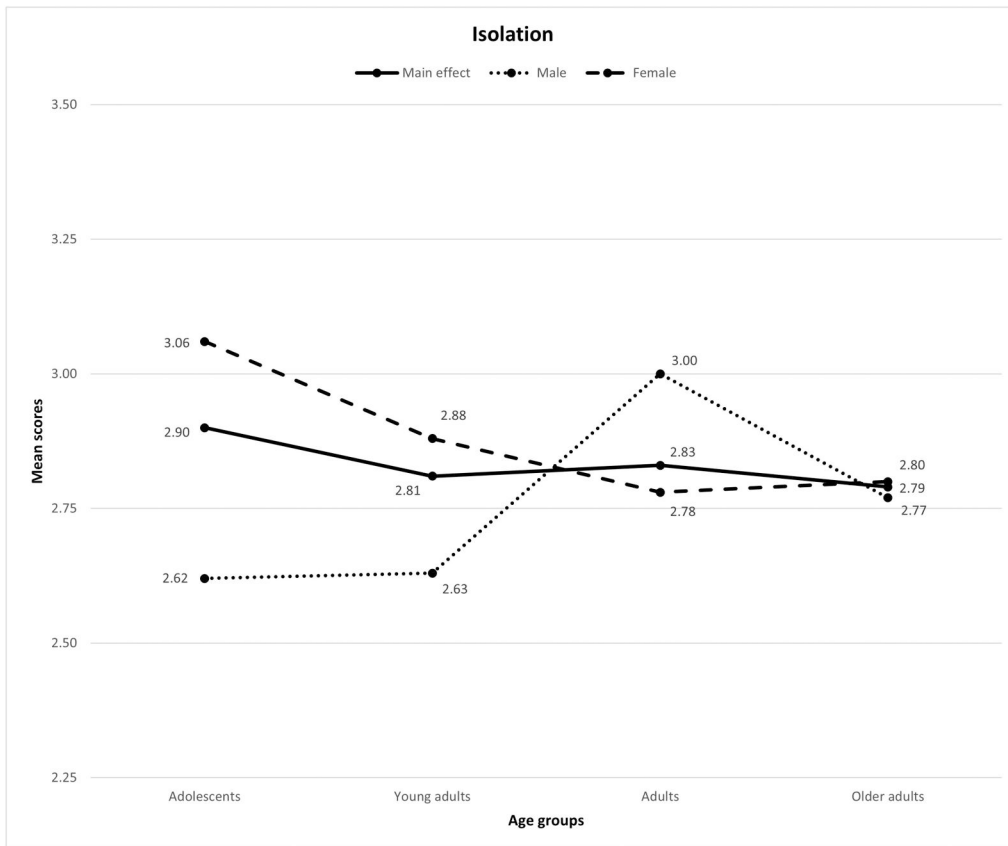


Figure 5. Graphic representation of the main effect and interaction analyses for isolation.

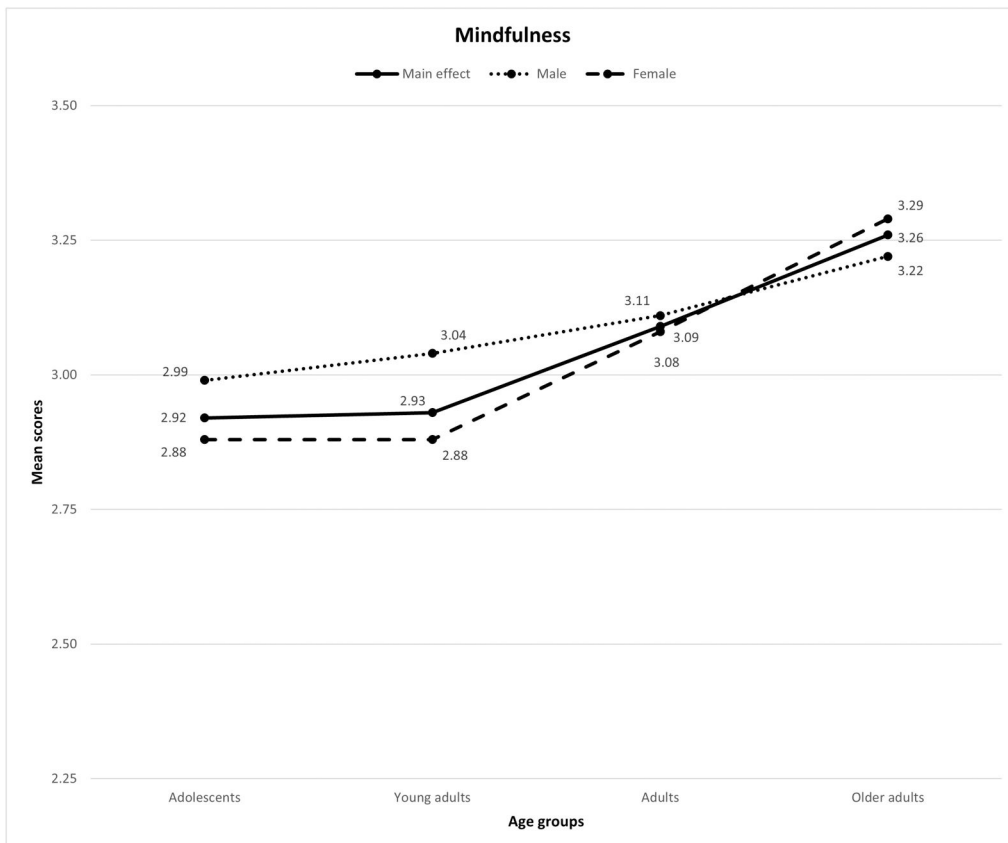


Figure 6. Graphic representation of the main effect and interaction analyses for mindfulness.

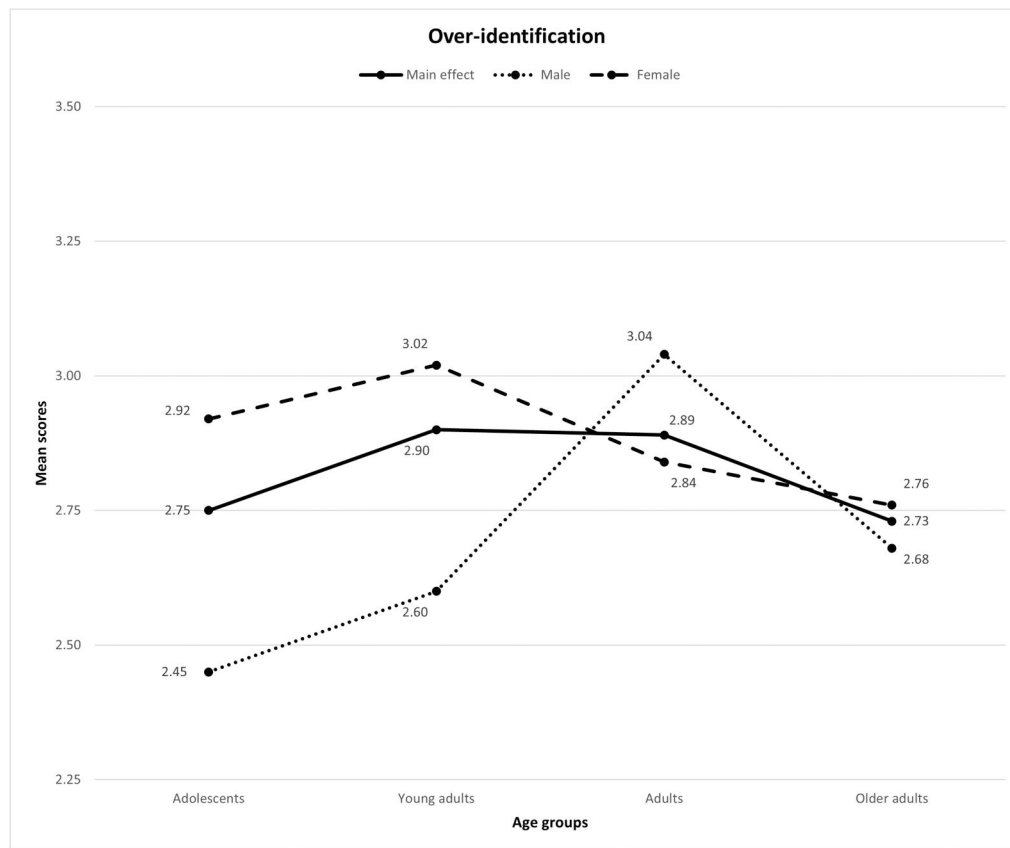


Figure 7. Graphic representation of the main effect and interaction analyses for over-identification.

Over-identification. Based on [Online Supplementary Material 1](#), young adults and adults may have reported significantly higher Over-identification compared to adolescents and older adults.

Gender comparisons

A graphic representation of these analyses is also available in [Figures 1–7](#). The mean and standard deviation values for self-compassion and its components, according to age-group and gender, can be found in [Online Supplementary Material 2](#). There was no significant age-group x gender interaction for Self-judgment, Common Humanity, and Mindfulness. There was a significant age-group x gender interaction for: Overall Self-compassion, $F(3, 875) = 3.99, p = .008, \eta_p^2 = .01$; Self-kindness, $F(3, 878) = 2.79, p = .040, \eta_p^2 = .01$; Isolation, $F(3, 878) = 4.80, p = .003, \eta_p^2 = .02$; and Over-identification, $F(3, 879) = 5.86, p = .001, \eta_p^2 = .02$. According to Cohen (1988), all effect sizes were considered small. Statistically significant results are summarized next, according to the component. The full summary of values for F ratio, statistical significance, and effect size is available in [Online Supplementary Material 2](#).

Comparisons across age-groups

Overall Self-compassion. There were no statistically significant differences among male or female participants across all the age-groups.

Self-kindness. There were no statistically significant differences among male or female participants across all the age-groups.

Isolation. There were no statistically significant differences among male participants across all the age-groups. For female participants, adolescents reported significantly higher Isolation compared to adults ($p = .034$).

Over-identification. There were no statistically significant differences among female participants across all the age-groups. For male participants, adults reported significantly higher Over-identification compared to adolescents ($p = .001$) and young adults ($p = .035$).

Comparisons within age-groups

Overall Self-compassion. Male adolescents scored significantly higher compared to female adolescents ($p = .002$).

Self-kindness. Scores for male adolescents were marginally, but significantly, higher compared to female adolescents ($p = .049$).

Isolation. Scores for female adolescents were significantly higher compared to male adolescents ($p < .001$). There was also a trend for scores for female young adults to be higher compared to male young adults ($p = .050$).

Over-identification. Scores for female adolescents were significantly higher compared to male adolescents ($p < .001$), and scores for female young adults were significantly higher compared to male young adults ($p = .001$).

Discussion

Several studies have demonstrated the benefits of fostering compassion for the self, and this protective role of self-compassion has been found in persons of all ages (Macbeth & Gumley, 2012; Marsh et al., 2018; Tavares et al., 2023). Nonetheless, self-compassion may vary across the human lifespan as individuals engage in distinct developmental tasks. Some studies have suggested that self-compassion increases with age (Allen et al., 2012; Homan, 2016; Hwang et al., 2016; Lee et al., 2021; Murn & Steele, 2020; Neff & Vonk, 2009; Wren et al., 2012). Likewise, male and female individuals of different age-groups tend to report distinct patterns of self-compassion, with gender differences in overall self-compassion becoming non-significant for the older age-groups (Yarnell et al., 2015). More research is needed to understand if differences in self-compassion, as well as differences in its components, exist in distinct age-groups, and to investigate potential interactions between age-groups and gender. In particular, more research is needed to understand gender differences in self-compassion and its components across and within distinct age-groups. The present study, using a cross-sectional design and a continuous multigenerational sample, aimed to address such issues. In the following subsections, we contextualize and discuss the implications of this study's findings according to the research objectives.

Age-group comparisons

The first objective was to study differences in Overall Self-compassion and its six components across the aforementioned age-groups. As per our H1, we expected that Overall Self-compassion would be lowest for adolescents, gradually increasing for young adults and adults, and be highest for older adults. This hypothesis was not confirmed, as there was no significant main effect of age-group on Overall Self-compassion. These results differ from those reported by

Homan (2016), Hwang et al. (2016), Lee et al. (2021), Murn and Steele (2020), Neff and Vonk (2009), and Wren et al. (2012). Our findings are, however, in accordance with the study by Phillips and Ferguson (2013), who showed a weak and non-significant correlation between self-compassion and age. Future research with longitudinal designs and more diverse samples will be useful to clarify these mixed findings. Alternatively, whereas Overall Self-compassion may similarly characterize all age-groups, different components may be distinctive to different age-groups.

Common Humanity and Mindfulness increased from adolescence (lowest scores for both) toward older adulthood (highest scores for both). These results confirm H2 and are in accordance with those by Murn and Steele (2020), suggesting that being able to recognize the universality of suffering and to understand that such suffering is an inherent human condition may heighten as individuals grow older. The same can be said about being able to uphold a mindful perspective when undergoing distress. From a lifespan developmental perspective, this increase in Common Humanity and Mindfulness may be contextualized as we shift from finding and exploring new roles, that is, developmental tasks typical of younger age-groups, to establishing and mastering these roles while better understanding our existence in relation to, and with, others, that is, developmental tasks typical of older age-groups (Havighurst, 1972; Zadworna, 2023). In turn, this may be helpful as the individual engages with some challenging developmental tasks typical of older age, such as coping with loss at different levels. For example, dealing with sensorial losses and cognitive and physical decline may be facilitated by a mindful perspective, making it possible to explore and reflect upon these difficult experiences without enmeshing the self with them. Likewise, a sense of common humanity may help the individual to realize that such losses are not a signal of personal inadequacies, but rather, are shared with everybody else as they age. In fact, Allen et al. (2012) have demonstrated that older adults higher in self-compassion seem to be less negatively affected by limitations typical of older age (e.g., hearing loss) and more willing to use compensation strategies to deal with said limitations (e.g., ask people to repeat themselves when they could not hear them the first time).

Though specific between-group differences could not be detected, the same pattern of results was found for Self-judgment, which increased from adolescence (lowest score) toward older adulthood (highest score). As individuals grow older, they may develop a more

judgmental and critical view of their self. From a lifespan perspective, they may then struggle to master societal roles and to adjust to different kinds of losses, that is, the developmental tasks associated with adulthood and older adulthood, respectively (Havighurst, 1972; Hutteman et al., 2014; Zadworna, 2023). This presents an interesting dichotomy when considered in light of the previous findings regarding Common Humanity and Mindfulness. It should be reminded, however, that the self-compassion components are conceptualized as not mutually exclusive (Neff, 2003a, 2003b). In this case, increased Common Humanity and Mindfulness as one ages are not incompatible with also increased Self-judgment. Returning to our previous example, it is possible that experiences such as sensorial losses and cognitive and physical decline are associated with treating the self in a cold and harsh manner, while also noticing their existence in oneself and in others. Indeed, Bennett et al. (2017), in a sample of women aged 65–94 years, examined the experiences of self-compassion and perceptions of its utility as a resource in the face of aging body-related changes. Results showed that, despite being self-compassionate in the sense of accepting their physical limitations, those participants were also critical of their body's functionality and appearance. Although this study had a very specific focus, it highlighted important nuances in the experience of self-compassion by older adults.

Finally, Over-identification increased from adolescence to young adulthood (highest score), remained similar toward adulthood, and decreased toward older adulthood (lowest score). Our H3, based on the work by Karakasidou et al. (2020), who found a consistent decrease of Over-identification with age, was therefore partially confirmed in that the older adult group did report the lowest scores of Over-identification. The present study's findings may reflect our adolescent sample being relatively young, and participants might still be developing their capacity for abstract thinking and introspection. Therefore, developmental tasks such as achieving independence, preparing for a professional occupation, or exploring their role within society (Havighurst, 1972; Pinguart & Pfeiffer, 2020; Schleyer-Lindenmann, 2006) may not yet be perceived as challenging and, in turn, these participants may not have been as prone to overidentify their self with negative emotions and cognitions related to such tasks. As the capacity for abstraction emerges, it may give room to the higher Over-identification scores reported by young adults, which were maintained by adulthood. The subsequent decrease in Over-

identification in older adults suggests that challenging tasks such as processing losses in physical, cognitive, and social domains may be perceived as not so distressing as developmental tasks typical of younger age-groups.

Gender comparisons across age-group

The second objective was to investigate the role of gender on the relationship between age and self-compassion. As per H4, we expected that, for male and female participants, Overall Self-compassion, Common Humanity, and Mindfulness would increase from adolescence toward older adulthood. This hypothesis was not confirmed, given the lack of statistical significance. Nonetheless, for female participants, we did find an increase in Overall Self-compassion from the youngest to the oldest age-group. Similarly, regarding Common Humanity and Mindfulness, both increased from adolescence toward older adulthood, and this was found for both male and female participants (the exception being female adolescents and female young adults, who reported identical Mindfulness scores). These results are in line with our findings regarding the main effect of age-group on these components. Common Humanity and Mindfulness do, indeed, seem to be relevant to foster self-compassion as one grows older, irrespective of gender. This, in turn, may foster one's mental health and help with engaging successfully in relevant developmental tasks (Zadworna, 2023), as we explored in relation to our first research objective.

Regarding Over-identification, as per H5 and based on the study by Karakasidou et al. (2020), we expected that, for male participants only, Over-identification would decrease from adolescence toward older adulthood. This hypothesis was not confirmed and, indeed, the present study found a peculiar pattern where Over-identification scores in male participants were lowest in adolescence, increased toward adulthood (highest scores), and decreased toward older adulthood. Such disparity in results may be related to differences in defining age-groups, that is, whereas the present study defined specific age-groups for adolescents and young adults, Karakasidou et al. (2020) considered an age interval ranging from 18 to 30 years old. In fact, such disparity also highlights the importance of considering the idiosyncrasies of distinct age-groups, as they engage in different developmental tasks. However, these findings corroborate what was discussed about the significant main effect of age on Over-identification and suggest that this main effect

may be driven mainly by the male participants' scores. For male individuals, therefore, it is possible that developmental tasks such as relating to a romantic partner and starting a family or getting started on a profession (young adulthood), as well as developmental tasks such as raising teenaged children or adjusting to the physiological changes of middle age (adulthood), may be associated with a higher enmeshing of the self with negative emotions and cognitions.

We did not establish *a priori* hypotheses for the other components. Regarding Self-kindness and Self-Judgment, there were no significant gender differences across the age-groups. Similarly, and regarding Isolation, no significant differences were found among the four age-groups for male participants. In female participants, however, Isolation decreased from adolescence (highest score) toward adulthood (lowest score), and remained practically identical in older adulthood. From a developmental perspective on gender differences in adolescence, female adolescents are more prone to a ruminative response style to stressful or adverse events and to increased emotional intensity and reactivity during puberty (Spear, 2013). These factors, in interaction with genetic influences, are associated with elevated internalized symptoms in female adolescents (Alloy et al., 2016; Hankin, 2009), which may also explain the tendency of female adolescent participants to see their internal experiences as separate from others, rendering them a sense of isolation. As female individuals grow older and gradually master their roles in society, this may help to reduce Isolation (Havighurst, 1972; Pinquart & Pfeiffer, 2020). For example, from adolescence to young adulthood, Isolation may decrease as female individuals successfully establish a family, find a congenial social group, and take on civic responsibility by starting a professional career. Our results are also interesting given the non-significant main effect of age-group on Isolation and highlight the importance of gender analyses in identifying potential vulnerable groups.

Gender comparisons within age-groups

The third objective was to study gender comparisons within each age-group for Overall Self-compassion and each of its component. Regarding Overall Self-compassion, as per our H6, we expected to find higher scores for male participants, compared to female participants, in every age-group except older adults. This hypothesis was partially confirmed. Male adolescents reported significantly higher Overall Self-compassion compared to female adolescents. No

significant gender differences were found within the other age-groups. These results align with those reported by Yarnell et al. (2015) and seem to support the idea that gender differences in Overall Self-compassion subside across the stages of human development. As per H7, we also expected that the female adolescents would report the lowest scores for Overall Self-compassion. Again, this hypothesis was partially confirmed, as female adolescents showed the second lowest Overall Self-compassion scores, practically identical to male adults. These results are in accordance with those by Bluth and Blanton (2015) and Bluth et al. (2017) and suggest that developing a kind and warm relationship with the self during distressing times may be particularly difficult for female adolescents and male adults. From a lifespan development perspective, it seems that female individuals may struggle to be self-compassionate whilst engaging in developmental tasks typical of adolescence (e.g., developing close relationships with peers; accepting one's body; achieving emotional independence from parents), whereas, for male individuals, this struggle seems to be more notorious in relation to the developmental tasks typical of adulthood (e.g., relating to one's spouse, teenaged children, and aging parents; accepting and adjusting to the physiological changes of middle age).

Regarding Over-identification, as per H8, in the adolescent and young adult age-groups, we expected that male participants would report higher scores than female participants. This hypothesis was not confirmed. In fact, male adolescents and male young adults reported significantly lower Over-identification compared, respectively, to female adolescents and female young adults. There were no significant gender differences regarding the adult and older adult age-groups. These results are contradictory to the findings by Karakasidou et al. (2020). The disparity in results, once more, may stem from differences in how the age-groups were defined. The present study, as already discussed, provided results based on a larger number of age-groups and also had the advantage of defining said age-groups according to objective criteria (i.e., the recommendations by the WHO) and according to specific stages of human development (i.e., the conceptualization by Havighurst, 1972). Younger female individuals, therefore, may particularly struggle with Over-identification while engaging in developmental tasks typical of adolescence and young adulthood. This, however, does not seem to be the case for younger male individuals. As previously discussed, Over-identification seems to increase for male

individuals as they grow from adolescence to adulthood. Taken together, our results suggest that, for female individuals, developmental tasks related to finding and exploring new roles may be associated with an increased enmeshing of the self with negative emotions and cognitions, whereas, for male individuals, this seems to happen in relation to developmental tasks requiring the mastery of previously established roles.

Finally, we did not establish *a priori* hypotheses for the other components. Regarding Self-kindness, male adolescents reported significantly higher scores compared to female adolescents and there were no significant gender differences within the other age-groups. Conversely, male adolescents reported significantly lower Isolation scores compared to female adolescents and there was a trend for male young adults to report lower scores compared to female young adults. These within age-group gender comparisons for Self-kindness and Isolation corroborate our previous findings regarding Overall Self-compassion, namely, the tendency for gender differences to become less pronounced throughout the lifespan and the understanding of female adolescents as a vulnerable group.

General discussion

The present study's results showed that Overall Self-compassion scores were similar across four major stages of human development: adolescence, young adulthood, adulthood, and older adulthood. Self-kindness and Isolation scores were also similar. From a lifespan perspective, it seems that Overall Self-compassion and Self-kindness are beneficial resources irrespective of the stage of development. Overall Self-compassion and Self-kindness may, therefore, foster psychological well-being and, in turn, facilitate the achievement of relevant developmental tasks, from the exploring and establishing of new roles for younger age-groups, to the gradual mastery of these roles, to, later, adjusting to losses at different levels for the oldest age-group. Likewise, a sense of Isolation does not seem to be an issue particularly typical of any life stage. Self-judgment, Common Humanity, and Mindfulness scores increased from adolescence toward older adulthood. This suggests that the transition from exploring roles to mastering these roles is associated with, on the one hand, being increasingly mindful and connecting with others' experiences, and, on the other hand, developing increasing feelings of criticism toward the self. Finally, the inverse-U pattern of Over-identification from adolescence toward older

adulthood suggests that exploring new roles is associated with particularly intense emotional reactions, which may subside as such roles are mastered and thus lessening the process of over-identification.

Gender comparisons allowed a further understanding of the relationship between age-groups and self-compassion. No gender differences were found in the relationship between age-group and Self-kindness, Self-judgment, Common Humanity, and Mindfulness. Results regarding Overall Self-compassion, despite non-significant, suggest a trend where female individuals may develop self-compassion with age, whereas male individuals may struggle to be self-compassionate as they grow older. Regarding Isolation, female participants' scores revealed a decrease from adolescence toward older adulthood. Finally, regarding Over-identification, male participant scores increased from adolescence to adulthood and decreased toward older adulthood. Together, results regarding these two last components corroborate the findings regarding Overall Self-compassion, accentuating how female individuals may gradually experience less distress and possibly engage in their developmental tasks in a more constructive way, whereas male individuals may follow an opposite path.

From a research perspective, the present study highlights the importance of taking into consideration the self-compassion components and potential interactions between sociodemographic characteristics such as age-group and gender. As shown by the main effect analyses, investigating the components, along with testing for gender differences, allowed for a better understanding of the non-significant effect of age on Overall Self-compassion. Additionally, this study's results are of importance from a clinical perspective. Female adolescents and male adults were found to be particularly vulnerable as they seem to struggle more to build a positive, warm, kind relationship with the self during challenging times. Therefore, self-compassion-based interventions, such as the Mindful Self-Compassion program (MSC; Germer & Neff, 2013, 2019), could be of great relevance for these individuals' mental health and well-being. For example, the MSC could be used to help female adolescents to regard their struggles related to body image, academic pressure, or social acceptance with self-kindness rather than self-judgment, and to understand that such challenges are shared by all individuals of a similar age. Similarly, mindfulness practices could help female adolescents to observe and experience intense emotions such as fear or shame without over-identifying the self with them and, therefore, fostering a more

adaptive emotional regulation. In a similar way, the MSC could be used to help male adults in adjusting to the midlife transition and managing challenges and responsibilities related to family life or professional career. In this case, a self-compassionate mindset could help these individuals to, for example, adaptively face feelings of inadequacy or failure when life does not align with earlier expectations and plans.

Limitations and conclusions

The present study is not without limitations. First, it had a cross-sectional design and could not provide causal relationships or within-participant trajectories concerning the studied variables, limiting the scope of conclusions drawn. Likewise, conclusions are limited by the fact that male participants were underrepresented in the present study's sample, particularly in the male adults age-group. Additionally, all the data was collected with self-report instruments only. Finally, results regarding the main effect of age-group on Self-judgment and Over-identification should be taken with caution, given that the Bonferroni test could not detect the group differences indicated by the analysis of variance (ANOVA).

Future research with multigenerational samples recruited in different settings and cultures, as well as studies with longitudinal designs, will be useful to further expand the conclusions put forth here. Similarly, a literature review and/or meta-analysis examining self-compassion across both age and gender will be useful to complement and expand the work by Yarnell et al. (2015) and our own, and to provide a clearer and more up-to-date summary of the state of the art in this field. Future research could also benefit from including a childhood age-group. Likewise, and given the fast pace at which developmental changes occur in childhood and adolescence, it would be interesting to subdivide these age-groups and, for example, compare younger children/adolescents and older children/adolescents. Additionally, it would also be interesting to subdivide the adulthood age-group, given that, in the present study, the age range used for adulthood was quite large (i.e., 25–59 years old). Future research including other compassion-related constructs (e.g., compassion toward others) will also be useful to complement current results regarding self-compassion. Finally, future research that accommodates for the clinical implications of our findings will also be important. For example, while testing the feasibility and efficacy of self-compassion-based interventions, researchers should investigate the role of the

six components along with overall self-compassion and, also, be mindful of potential differences in these variables related to age and/or gender. Additionally, it might be interesting to target specific needs of the vulnerable groups identified in the present study (i.e., female adolescents and male adults) and investigate if, and how, such an intervention will be helpful for these individuals.

Notwithstanding these limitations, the present study is innovative in using a lifespan framework to contextualize its findings and in the recruitment of a continuous multigenerational sample, which was then categorized into objective and well-defined age-groups that reflect specific stages of human development. The present study also contributed to the literature by conducting analyses of interaction effects, which complemented main effect analyses. Furthermore, current findings provide important insights in the study of self-compassion by taking into consideration the role of age-groups, gender differences, and the six components of self-compassion, while also providing useful guidance for the optimization of psychological interventions.

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Data availability statement

Data associated with this research is available from the first author, upon reasonable request.

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