**The influence of peer non-suicidal self-harm on young adults’ urges to self-harm:**

**experimental study**

27 February 2023 – resubmission 28 September 2023

## Supplementary methods

### Hypothesis-generating analyses

To complement our testing of **hypothesis 1** we conducted a set of pre-registered hypothesis-generating analyses to establish whether peer characteristics modify the degree to which exposure to peer self-harm influences urges to self-harm. We stratified our t-tests by six peer-related factors specified *a priori* (peer’s age, peer’s gender, peer’s ethnicity, a rating of emotional closeness, length of the friendship, perceived likelihood of self-harming in real life, and by one additional factor: peer status (admired/neutral first). We predicted that the magnitude of any increase in urges to self-harm after exposure to peer self-harm would be greater in the context of greater similarity to peer (similar age/gender/ethnicity, greater emotional closeness, longer length of friendship), greater likelihood of self-harming in real life, and higher social status (admired *versus* neutral presented first).

### Secondary hypotheses

As secondary hypotheses, complementing our testing of **hypothesis 2**, we tested whether the association between suggestibility and change in perceived ability to control urges to self-harm is modified by:

1. social status of the peer (assuming a greater magnitude of change for an admired *versus* neutral peer)
2. participant’s age (assuming a greater magnitude of change if younger in age), to assess whether there is evidence to support changes in the magnitude of the association across the developmental trajectory
3. past suicide of a relative or friend (assuming a greater magnitude of change if exposed to suicide loss), to assess for evidence that cognitive availability of suicide augments risk.

We also conducted a pre-registered hypothesis-generating analysis to test whether higher catastrophising scores contribute to explaining whether those with a negative cognitive–affective response to others’ self-harm may be more likely to exhibit change in scores post-exposure.

### Recruitment methods

We recruited young people via adverts on social media (individual researcher and university departmental Twitter accounts) and six specific research participation databases: MQ Participate, Call for Participants, the UCL ICN and SONA research subject recruitment databases, the KCL research study recruitment platform, and the NIHR-funded GLAD study database at KCL. We masked participants to our hypotheses, explaining that our aim was to “increase our knowledge about psychological processes that may contribute to self-harm in young people” and to “understand how knowing about someone else self-harming, either within your group of friends, relatives, or acquaintances, may affect your own behaviours”.

Adverts were posted in June 2020 and recruitment continued until the end of October 2020.

### Online screening methods

Study data were collected and managed using REDCap electronic data capture tools hosted at UCL (Harris et al., 2019, 2009). REDCap (Research Electronic Data Capture) is a secure, web-based software platform designed to support data capture for research studies, providing: 1) an intuitive interface for validated data capture; 2) audit trails for tracking data manipulation and export procedures; 3) automated export procedures for seamless data downloads to common statistical packages; and 4) procedures for data integration and interoperability with external sources.

### Payment to participants

Participants were compensated for their time in £5 (20-minutes) or £7.50 (30 minutes) shopping vouchers depending how long the session took to complete).

### Risk protocol

We excluded all those identified on screening as having felt suicidal in the past month. However, the research assistant contacted each of these individuals by email or telephone (as per stated preference) to explain the rationale for exclusion, assess risk, and offer appropriate signposting or support. We captured GP information in the online screening form prior to asking about suicidality so that we could escalate concerns where appropriate.

### Wording of questions for nomination of peers

At the start of the experiment, we asked participants for the first names of three different friends, explaining that they would feature in a set of vignettes presented shortly. The wording of these questions was as follows.

Admired peer

“*We would like you to think of someone in your social circle (but not a relative) who you look up to and admire. We would like you to think about them when we present a fictional scenario to you in a few minutes time, to bring it closer to your own reality*. *The name you enter will be kept confidential*”

Neutral peer

“*We would like you to think of someone in your social circle (but not a relative) who you do not look up to or admire. Again, we would like you to think about them when we present a fictional scenario to you in a few minutes time, to bring it closer to your own reality. We would suggest not choosing someone who you actively dislike, but instead someone who you feel ambivalent about*.”

Wash-out peer

“*Finally, we would like you to think of someone in your social circle (but not a relative) who you have not mentioned in the two previous examples you provided, and who you enjoy the company of. We would like you to think about them when we present a final fictional scenario to you*.”

### Validity, reliability and scoring of cognitive measures

* ***suggestibility:*** we usedthe Resistance to Peer Influence (RPI) Scale, a 10-item self-report measure with demonstrated validity and reliability in samples of US young people aged 10-30 years (Steinberg and Monahan, 2007). The RPI is scored based on respondents picking one item in each of the 10 competing pairs to state if each was “sort of true” or “really true”. Each item is scored (1-4) with the total scale score being the average of scores across the 10 items. Higher scores suggest greater resistance to peer influence (low suggestibility).
* ***perceived ability to control feelings of wanting to self-harm in the next 24 hours:*** we used one item (item 10) from the original 21-item version of the Self-Efficacy to Resist Suicidal Action Scale (SEASA), a self-report instrument designed to assess perception of one’s capacity to refrain from attempting suicide. The original set of 21 items were selected by an expert panel and then validated in a sample of 464 adults enrolled in a substance misuse programme (Czyz et al., 2014), but has yet to be tested for reliability. Each SEASA item is rated on a 10-point scale ranging from 0 (very uncertain) to 9 (very certain), such that lower scores denote higher risk of imminent self-harm. Factor analysis found all 21 items loaded onto a single factor, so the panel reduced these to six items for succinctness, guided by theory and expert consensus, during which item 10 was excluded (Czyz et al., 2014). However, we felt that item 10 best captured the construct we wished to measure in this experiment; the immediate intensity of urges to self-harm, as a proxy for actual self-harm. We therefore chose this item on grounds of face validity, adapting its wording to remove reference to suicide attempt, changing this from “*How certain are you that you could control future feelings of wanting to harm yourself or make a suicide attempt?”* to “*How certain are you that you could control future feelings of* *wanting to* *harm yourself*?”.
* ***personality disorder screen:*** we used the 8-item self-report Standardised Assessment of Personality–Abbreviated Scale (SAPAS-SR); an eight-item screen for identifying a probable diagnosis of personality disorder based on DSM-IV-TR criteria(Germans et al., 2008). The SAPAS was originally validated in a psychiatric population(Moran et al., 2003) but has also been validated for use in general population samples, demonstrating predictive validity in terms of future functioning and clinical impairment (Fok et al., 2015). We used the population-derived cut point of four to indicate high probability of a diagnosis of personality disorder (Fok et al., 2015), creating a binary measure.
* ***catastrophising***: we used the 24-item self-report Catastrophising Questionnaire, a validated instrument designed to (i) measure catastrophising outside the specific context of pain and (ii) differentiate between catastrophising and other constructs such as anhedonia or worry  (Pike et al., 2021). Each item is rated on a 5-point scale ranging from 1 (Never) to 5 (Always), with a score range of 24 to 120, such that higher scores indicate a greater tendency to catastrophise. The Catastrophising Questionnaire has demonstrated validity and reliability in an international sample of adults aged 18 to 60 years (Pike et al., 2021). It is negatively associated with risk-taking(Pike et al., 2023), but in pain contexts it is associated with suicidal behaviour(Rogers et al., 2021).

### Statistical analysis plan for additional analyses

#### Hypothesis-generating analysis: influence of peer characteristics

We used stratified t-tests to explore how findings might differ by six peer-related factors specified *a priori:* peer age (younger/same age *versus* older), peer gender (same *versus* different), peer ethnicity (same *versus* different), emotional closeness to the peer (close *versus* not very close), length of the friendship (under *versus* over five years), and perceived likelihood of the peer self-harming in real life (likely *versus* unlikely). For these tests we split the data, considering findings for admired peers and neutral peers separately.

We also tested the effect of peer status by conducting stratified t-tests splitting the sample into whether an admired peer or a neutral peer was presented first.

#### Interaction tests

To test **hypothesis 3**, whether appraisal of the index self-harmer (admired *versus* neutral) modifies the association between suggestibility scores and a change in perceived propensity to self-harm after exposure to peer self-harm, we added peer status (binary variable) as an interaction term in the regression models, predicting a stronger association for admired peers (who may have more influence on those who were most suggestible).

To test **hypothesis 4,** whether age modifies the association between suggestibility scores and a change in perceived propensity to self-harm after exposure to peer self-harm, we added age as an interaction term, separately as a continuous and then binary (median split) variable.

To test **hypothesis 5,** whether exposure to suicide bereavement in a friend or relative modifies the association between suggestibility scores and a change in perceived propensity to self-harm after exposure to peer self-harm, we added past suicide bereavement (three-category variable, capturing recency) as an interaction term, predicting a stronger association in those exposed to suicide bereavement.

#### Contribution of catastrophising

For our hypothesis-generating analysis to estimate the contribution of catastrophising, we first described the association between catastrophising scores and a) baseline perceived ability to control urges to self-harm, b) suggestibility scores, and c) changes in perceived ability to control urges to self-harm after exposure to peer self-harm. We then added catastrophising scores (continuous measure) to the linear regression model estimating the association between peer suggestibility and any change in perceived ability to control urges to self-harm after exposure to a peer self-harm vignette. We predicted that this would attenuate the association, thus providing evidence that higher catastrophising scores contribute to explaining whether those with a negative cognitive–affective response to others’ self-harm may be more likely to exhibit change in scores post-exposure.

## Deviations from pre-registration

We made a team decision to use a more stringent p-value threshold (0.01) than that pre-registered (0.05) given multiple testing.

Although in our original protocol our stratified t-tests regarding pre-specified characteristics (peer age, peer gender, peer ethnicity, emotional closeness to peer, length of friendship, and perceived likelihood of the peer self-harming in real life) were presented as part of hypothesis 1, we decided to present these findings within our supplementary results due to the multiple comparisons, the small numbers of observations in each stratum, and the risk of type I error. We also added one additional factor our stratified t-tests: whether the admired or the non-admired person was presented first. This was on the basis that this variable had been selected *a priori* as a covariate in our main model for testing hypothesis 2 but had been omitted when considering the stratified t-tests linked to hypothesis 1.

Finally, we added *post hoc* tests to compare the distribution of suggestibility (RPI) scores in our sample to two normative samples (as described below).

## Supplementary results

### Risk incidents

On contacting the 17 individuals we had excluded from the study based on recent suicidal ideation, we were able to conduct risk screening (using an established risk assessment and safety planning tool) for eight individuals. However, nine did not respond. For the eight individuals risk assessed, seven were assessed as low risk and one as medium risk. For the nine individuals who did not respond, and the one individual assessed as medium risk, we contacted the GP to outline theoretical risks in the context of the study.

On 24-hour check-in after all 100 online testing sessions, no risk issues were identified. All participants were directed to our list of support sources for people who self-harm in case needed at any point: <https://www.ucl.ac.uk/mental-health/research/influences-self-harm-ish-project/support-sources>

### Distribution of suggestibility scores

Suggestibility (RPI) scores in our sample were normally distributed (mean=2.67; SD=0.59). A *post hoc* comparison of means with an older normative sample in the US (Steinberg and Monahan, 2007), comprising 407 young people aged 18 to 30 years from a community setting with an unspecified self-harm history (mean=3.40; SD=0.43) showed that our sample’s mean RPI scores were lower (denoting greater suggestibility) and more variable (Welch two sample t-test): *t*(120.31) = -11.33, 95% CI=-0.85,-0.60; *p* <0.001). This was consistent across all age groups (Supplementary Table 1). It was possible that this reflects the younger age of our sample and/or a higher prevalence of self-harm in our sample (due to our inclusion criteria). A further *post hoc* comparison of means with that of a younger normative sample comprising 35 typically developing children aged 10 to 14 years from the UK, Canada and US, and with an unspecified self-harm history (mean RPI =2.88; SD=0.44; median=2.84) (Grosbras et al., 2007), showed that our sample’s mean RPI was also lower (denoting greater suggestibility) and more variable than that of the younger sample. These between-group differences therefore seemed to reflect differences in self-harm history rather than age.

### Hypothesis-generating analysis: influence of peer characteristics

Supplementary Table 2 describes peer characteristics. The majority of peers selected were the same gender and ethnicity as the participant. Age varied substantially, with 18% of admired peers and 12% of neutral peers being over ten years older than the participant.

The findings of stratified t-tests investigating the influence of peer characteristics specified *a priori* (Supplementary Table 3) showed that for an *admired peer*, perceived ability to control urges to self-harm decreased significantly between baseline and after exposure to self-harm where that peer was of the same gender (but not when a different gender), of the same ethnicity (but not when a different ethnicity), rated as close (but not when rated as not very close), was a relatively recent friendship (but not when a friendship of over five years), or was judged to be unlikely to self-harm in real life (but not when judged to be likely to self-harm). Scores reduced significantly whether an admired peer was the same age as a peer (or younger) or if they were older.

Stratified t-tests showed that for a *neutral peer*, perceived ability to control urges to self-harm decreased significantly between baseline and after exposure to self-harm where that peer was of the same ethnicity (but not when a different ethnicity), was rated as close (but not when rated as not very close), was a relatively longer friendship (but not when a friendship of less than five years), or was judged to be unlikely to self-harm in real life (but not when judged to be likely to self-harm). Scores were not reduced significantly whether a neutral peer was the same age as a peer (or younger) or if the peer was older, or whether a neutral peer was the same gender or a different gender.

Our hypothesis-generating analysisinvestigating the influence of whether an admired or neutral peer was presented first (Supplementary Figure 1) found that when an admired peer was presented first, perceived ability to control urges to self-harm decreased significantly between baseline and after self-harm exposure (t(53)=3.39, p=0.0013, mean difference= 0.63; 95% CI=0.26-1.00). However, when a neutral peer was presented first (t(42)=2.31, p=0.026, mean difference=0.58; 95% CI=0.07-1.08) the difference was not significant.

These findings (acknowledging small numbers of observations in each stratum and multiple comparisons) suggest that the socio-demographic characteristics and social status of a peer who self-harms may influence suggestion effects. It is possible that there is greater identification with peers who are similar in terms of ethnicity or gender, or judged to be close friends, but little influence of age on suggestion effects, acknowledging the wide distribution of peer ages. Such hypotheses require specific testing in a larger sample, investigating age effects carefully, to understand whether interventions to mitigate self-harm suggestion effects should be targeted at those with concordance on specific peer characteristics.

### Secondary hypotheses: interaction tests

We found no evidence to support **hypothesis 3,** regarding whether peer status (admired or neutral) modifies the association between suggestibility scores and change in SEASA score after peer self-harm exposure (p=0.301); **hypothesis 4**, regarding whether participant age modifies this association, whether using a continuous (p=0.553) or binary (p=1.000) measure of age; or **hypothesis 5**, that a history of suicide bereavement in a friend or relative modifies this association (p=0.122). However,all interaction tests were underpowered due to the sample size supporting analyses for our main hypothesis.

### Hypothesis-generating analysis: contribution of catastrophising

Catastrophising scores were negatively skewed (median=76, IQR=65-87; mean=75; SD=15.3), and comparable to scores for the international sample of adults aged 18 to 60 years used in the validation of this measure (Pike et al., 2021). There was no association between catastrophising scores and baseline perceived ability to control urges to self-harm (coefficient=-0.02; 95% -0.04, 0.002; *p*=0.076) or changes in perceived ability to control urges to self-harm after exposure to peer self-harm (coefficient=-0.01; 95% CI=-0.03, 0.01; p=0.315), but it was significantly associated with suggestibility (coefficient=-0.01; 95% CI=-0.02, -0.003; p=0.005).

When adding catastrophising scores to model 4 (used to test hypothesis 2), there was no change in the magnitude or direction of the non-significant association between peer suggestibility and changes in the perceived ability to control urges to self-harm after exposure to peer self-harm, with the estimate remaining non-significant (adjusted coefficient=0.091; 95% CI= -0.71, 0.89; p=0.821).

## Supplementary Figures and Tables

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| **Supplementary** **Figure 1: Mean SEASA scores at baseline, post-exposure, and wash-out, split by the order of vignettes (admired or neutral peer first)** |
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|  |
| 1. Shows mean SEASA scores at baseline (T0), average post-exposure (T1+T2/2), and wash-out (T3), split by the order in which participants were presented with the exposure vignettes. Paired t-tests reflect hypothesis 3 (baseline vs post-exposure for those who were exposed to self-harm of admired peer first; baseline vs post-exposure for those who were exposed to self-harm of neutral peer first)
2. Shows mean SEASA scores at baseline (T0), post-exposure to the first vignette (T1 or T2; admired for ‘admired first’ group, neutral for ‘neutral first’ group), post-exposure to the second vignette (T1 or T2; neutral for ‘admired first’ group, admired for ‘neutral first’ group, and wash-out (T3). Paired t-tests reflect hypothesis 3 (baseline vs admired; baseline vs neutral for each group)

Points represent individual SEASA scores, error bars represent standard deviation. Lines indicate individual participant trajectories across the task. For paired t-tests, \*\*\* = p < 0.001, \*\* = p < 0.05, \* = p < 0.1, n.s. = p > 0.1 |

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**Supplementary Table 1**: *Post hoc* comparison of study sample’s suggestibility (RPI) scores and normative scores

|  |  |  |
| --- | --- | --- |
|  | Influences on Self-Harm study data | normative data\* |
| Age (years) | n | mean | SD | n | mean | SD |
| 18 | 12 | 2.47 | 0.58 | 46 | 3.33 | 0.42 |
| 19 | 6 | 2.53 | 0.58 | 43 | 3.38 | 0.39 |
| 20 | 12 | 2.67 | 0.59 | 40 | 3.43 | 0.41 |
| 21-22 | 29 | 2.60 | 0.60 | 61 | 3.21 | 0.45 |
| 23-30 | 38 | 2.81 | 0.60 | 217 | 3.46 | 0.43 |
| Total  | 97 | 2.70 | 0.60 | 407 | 3.40 | 0.43 |

\* normative data from an older sample of 407 young people aged 18 to 30 years from a community setting in the US and with an unspecified self-harm history (Steinberg and Monahan, 2007)

**Supplementary Table 2**: **Characteristics of peers selected for vignettes**

|  |  |  |  |
| --- | --- | --- | --- |
| **Characteristics of peer** | **admired peer** **(n=97)** | **neutral peer** **(n=97)** | **wash-out peer** **(n=97)** |
|  | **median** | **IQR (range)**  | **median** | **IQR (range)** | **median** | **IQR (range)** |
| Peer age (years) | 23 | 21-27(16-69) | 22 | 20-25(10-65) | 22  | 20-24(10-55) |
|  | **N** | **%** | **N** | **%** | **N** | **%** |
| Peer age group\* |  |  |  |  |  |  |
| aged 22 years or younger | 42 | 43 | 53 | 55 | 54 | 56 |
| older than 22 years | 55 | 57 | 44 | 45 | 43 | 44 |
| missing | 0 | 0 | 0 | 0 | 0 | 0 |
| Peer age similarity to index case |  |  |  |  |  |  |
| Same age or younger  | 46 | 47 | 50 | 52 | 53 | 55 |
| Older  | 51 | 53 | 47 | 48 | 44 | 45 |
| Peer gender |  |  |  |  |  |  |
| male | 22 | 23 | 30 | 31 | 26 | 27 |
| female | 69 | 71 | 62 | 64 | 62 | 64 |
| transgender female | 1 | 1 | 1 | 1 | 1 | 1 |
| transgender male | 2 | 2 | 1 | 1 | 3 | 3 |
| gender variant/non-binary | 2 | 2 | 2 | 2 | 3 | 3 |
| Prefer not to say  | 1 | 1 | 1 | 1 | 1 | 1 |
| other | 0 | 0 | 0 | 0 | 1 | 1 |
| missing | 0 | 0 | 0 | 0 | 0 | 0 |
| Gender concordance with index case |  |  |  |  |  |  |
| same gender  | 70 | 72 | 61 | 63 | 68 | 70 |
| different gender  | 27 | 28 | 36 | 37 | 29 | 30 |
| Peer ethnicity |  |  |  |  |  |  |
| Asian | 18 | 19 | 14 | 15 | 18 | 19 |
| Black | 2 | 2 | 3 | 3 | 3 | 3 |
| Mixed race | 5 | 5 | 3 | 3 | 1 | 1 |
| White | 70 | 72 | 73 | 75 | 72 | 74 |
| other | 2 | 2 | 4 | 4 | 3 | 3 |
| missing | 0 | 0 | 0 | 0 | 0 | 0 |
| Ethnicity concordance with index case |  |  |  |  |  |  |
| same ethnicity  | 77 | 79 | 75 | 77 | 77 | 79 |
| different ethnicity  | 20 | 21 | 22 | 23 | 20 | 21 |
| Closeness to peer† |  |  |  |  |  |  |
| close | 92 | 95 | 25 | 26 | 91 | 94 |
| not very close | 5 | 5 | 72 | 74 | 6 | 6 |
| missing | 0 | 0 | 0 | 0 | 0 | 0 |
| Duration of friendship †† |  |  |  |  |  |  |
| Less than 5 years | 59 | 61 | 60 | 62 | 58 | 60 |
| 5 years or more  | 38 | 39 | 37 | 38 | 39 | 40 |
| Perceived likelihood of peer self-harming††† |  |  |  |  |  |  |
| likely (rated 4-9 on Likert-style scale) | 24 | 25 | 36 | 37 | NA | NA |
| unlikely (rated 0-5 on Likert-style scale) | 72 | 74 | 60 | 62 | NA | NA |
| missing | 1 | 1 | 1 | 1 | NA | NA |

IQR: interquartile range

**\***split at the overall median age of 22 years for all peers (IQR=20-25)

† closeness to peer was split at a specified point on a Likert-type scale: very close (scores of 3-5) *versus* not very close (scores of 1-2)

†† duration of friendship was split at mean overall value for length of relationship: 0-4 years *versus* 5+ years

††† perceived likelihood of peer self-harming was split at a specified point on a Likert-type scale: ‘not likely’ (scores of 0-4) *versus* ‘likely’ (scores of 5-9)

**Supplementary Table 3**: **Results of paired t-tests comparing baseline SEASA scores and scores after exposure to self-harm vignettes, stratified by a) peer characteristics specified *a priori,* and b) order of exposure (admired versus neutral peer first)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Comparison of baseline scores to scores after any self-harm exposure****Stratified by:**  | **observations** | **Mean difference (95% CI)** | **Degrees of freedom** | **t-statistic**  | **p value** |
| age of peer (admired peer) |  |  |  |  |  |
| younger than or same age as participant  | 46 | 0.87 (0.28, 1.46) | 45 | 2.97 | **0.0047** |
| older than participant | 51 | 0.62 (0.20, 1.06) | 50 | 2.92 | **0.0053** |
| age of peer (neutral peer) |  |  |  |  |  |
| younger than or same age as participant  | 50 | 0.58 (0.12, 1.05) | 49 | 2.46 | 0.0175 |
| older than participant | 47 | 0.36 (-0.03, 0.76) | 46 | 1.85 | 0.0711 |
| gender of peer (admired peer) |  |  |  |  |  |
| same gender | 70 | 0.8 (0.36, 1.24) | 69 | 3.62 | **0.0005** |
| different gender | 27 | 0.59 (-0.11, 1.20) | 26 | 2.02 | 0.0540 |
| gender of peer (neutral peer) |  |  |  |  |  |
| same gender | 61 | 0.30 (0.01, 0.59) | 60 | 2.04 | 0.0459 |
| different gender | 36 | 0.78 (0.11, 1.45)  | 35 | 2.35 | 0.0246 |
| ethnicity of peer (admired peer) |  |  |  |  |  |
| same ethnicity | 77 | 0.79 (0.37, 1.22) | 76 | 3.71 | **0.0004** |
| different ethnicity | 20  | 0.55 (-0.028, 1.13) | 19 | 1.99 | 0.0609 |
| ethnicity of peer (neutral peer) |  |  |  |  |  |
| same ethnicity | 75 | 0.57 (0.20, 0.95) | 74 | 3.06 | **0.0030** |
| different ethnicity | 22 | 0.14 (-0.32, 0.60) | 21 | 0.62 | 0.5441 |
| closeness† to peer (admired peer) |  |  |  |  |  |
| close | 92 | 0.79 (0.42, 1.16) | 91 | 4.27 | **<0.001** |
| not very close | 5 | -0.2 (-1.23, 0.84) | 4 | -0.5345 | 0.6213 |
| closeness† to peer (neutral peer) |  |  |  |  |  |
| close | 25 | 1.12 (0.42, 1.82) | 24 | 3.31 | **0.0029** |
| not very close | 72 | 0.25 (-0.08, 0.58 | 71 | 1.52 | 0.1319 |
| duration†† of friendship (admired peer) |  |  |  |  |  |
| less than 5 years | 59 | 0.78 (0.37, 1.19) | 58 | 3.80 | **0.0004** |
| 5 years or more | 38 | 0.33 | 37 | 2.08 | 0.0446 |
| duration†† of friendship (neutral peer) |  |  |  |  |  |
| less than 5 years | 60 | 0.25 (-0.078, 0.58) | 59 | 1.52 | 0.1328 |
| 5 years or more | 37 | 0.84 (0.24, 1.44) | 36 | 2.83 | **0.0076** |
| perceived likelihood††† of peer self-harming (admired peer) |  |  |  |  |  |
| likely | 24 | 0.58 (0.71, 1.20) | 23 | 2.36 | 0.0274 |
| unlikely | 72 | 0.69 (0.29, 1.10) | 71 | 3.43 | **0.0010** |
| perceived likelihood††† of peer self-harming (neutral peer) |  |  |  |  |  |
| likely | 36 | 0.31 (-0.19, 0.80) | 35 | 1.26 | 0.2146 |
| unlikely | 60 | 0 .48 (0.12, 0.84) | 59 | 2.68 | **0.0095** |
| order of exposure |  |  |  |  |  |
| admired peer presented first | 54 | 0.63 (0.26, 1.00) | 53 | 3.39 | **0.0013** |
| neutral peer presented first | 43 | 0.58 (0.07, 1.10) | 42 | 2.31 | 0.0259 |

Key:

† closeness to peer was split at a point on a Likert-type scale: very close (scores of 3-5) *versus* not very close (scores of 1-2)

††duration of friendship was split at mean overall value for length of relationship: 0-4 years *versus* 5 years and above

†††perceived likelihood of peer self-harming was split at a point on a Likert-type scale: ‘not likely’ (scores of 0-4) and ‘likely’ (scores of 5-9)

**Supplementary references**

Czyz, E.K., Bohnert, A.S.B., King, C.A., Price, A.M., Kleinberg, F., Ilgen, M.A., 2014. Self-efficacy to avoid suicidal action: Factor structure and convergent validity among adults in substance use disorder treatment. Suicide Life Threat Behav 44, 698–709. https://doi.org/10.1111/sltb.12101

Fok, M.L.-Y., Seegobin, S., Frissa, S., Hatch, S.L., Hotopf, M., Hayes, R.D., And, †, Moran, P., 2015. Validation of the standardised assessment of personality-abbreviated scale in a general population sample. https://doi.org/10.1002/pmh

Germans, S., van Heck, G.L., Moran, P., Hodiamont, P.P.G., 2008. The Self-report Standardized Assessment of Personality-abbreviated Scale: Preliminary results of a brief screening test for personality disorders. Personal Ment Health 2. https://doi.org/10.1002/pmh.34

Grosbras, M.-H., Jansen, M., Leonard, G., Mcintosh, A., Osswald, K., Poulsen, C., Steinberg, L., Toro, R., Paus, T., 2007. Neural Mechanisms of Resistance to Peer Influence in Early Adolescence. Journal of Neuroscience 27, 8040–8045. https://doi.org/10.1523/JNEUROSCI.1360-07.2007

Harris, P.A., Taylor, R., Minor, B.L., Elliott, V., Fernandez, M., O’Neal, L., McLeod, L., Delacqua, G., Delacqua, F., Kirby, J., Duda, S.N., 2019. The REDCap consortium: Building an international community of software platform partners. J Biomed Inform. https://doi.org/10.1016/j.jbi.2019.103208

Harris, P.A., Taylor, R., Thielke, R., Payne, J., Gonzalez, N., Conde, J.G., 2009. Research electronic data capture (REDCap)-A metadata-driven methodology and workflow process for providing translational research informatics support. J Biomed Inform 42. https://doi.org/10.1016/j.jbi.2008.08.010

Moran, P., Leese, M., Lee, T., Walters, P., Thornicroft, G., Mann, A., 2003. Standardised Assessment of Personality - Abbreviated Scale (SAPAS): Preliminary validation of a brief screen for personality disorder. British Journal of Psychiatry 183. https://doi.org/10.1192/bjp.183.3.228

Pike, A., Alves Anet, Á., Peleg, N., Robinson, O.J., 2023. Catastrophizing and Risk-Taking. Computational Psychiatry 7, 1–13.

Pike, A.C., Serfaty, J.R., Robinson, O.J., 2021. The development and psychometric properties of a self-report Catastrophizing Questionnaire. R Soc Open Sci 8. https://doi.org/10.1098/rsos.201362

Rogers, M.L., Joiner, T.E., Shahar, G., 2021. Suicidality in Chronic Illness: An Overview of Cognitive–Affective and Interpersonal Factors. J Clin Psychol Med Settings 28. https://doi.org/10.1007/s10880-020-09749-x

Steinberg, L., Monahan, K.C., 2007. Age Differences in Resistance to Peer Influence. Dev Psychol 43, 1531–1543. https://doi.org/10.1037/0012-1649.43.6.1531