Exploring collective costs and individual benefits of neoliberal feminism

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Abstract

A popular form of 'neoliberal feminism' promotes women's resilience *as individuals* to advance gender equality in leadership and beyond (Rottenberg, 2014). Ostensibly inspiring, this focus can increase beliefs that women, rather than inequitable social structures, are to blame for ongoing inequality (Kim et al., 2018). In this research, we examine another potential downside: that messages promoting individual resilience reduce women's collective-action intentions. Across three studies in the UK, undergraduate and graduate employed women (total $N=940$) read about gender inequality and then read messages either promoting individual resilience as a pathway to women's career advancement, or not. In two of three studies, women who received resilience messages had lower collective-action intentions – a negative effect that was either indirect, via reduced perceptions of gender discrimination and reduced anger over inequality (Study 1) or direct (Study 3). Across studies, we did not find evidence of individual benefits, and in Study 2, women who read messages promoting individual resilience reported lower personal control and career ambition. Together, these studies contribute to evidence showing downsides of neoliberal feminism. We discuss alternative ways to promote gender equality, including through messages that mobilise supporters of gender equality to challenge structural impediments to women's career advancement.

Keywords: gender inequality, collective action, resilience, neoliberal feminism

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The need for strong action to remedy gender inequality is underscored by its persistence. Men are 96.8% of CEOs in FTSE 250 companies (The Hampton-Alexander Review, 2019) and 92% of CEOs in the world's 500 largest corporations (Connley, 2021). In addition to the dearth of women in top-level leadership, the majority of women work in low-status, low-paid industries (Francis-Devine et al., 2021) and shoulder the burden of responsibility for unpaid caregiving and domestic work (The Fawcett Society, 2020). The gender-pay gap also persists: full-time working women earn 7.4% less than full-time working men in the UK, with the gap increasing to 15.5% when considering the median pay for all employees due to a significantly higher proportion of women than men who work part time (Francis-Devine & Ferguson, 2020).

A number of structural barriers, including unaffordable childcare and housing, contribute to the persistence of gender inequality. These barriers have increased over the last decade with neoliberal policies in the UK and other advanced capitalist democracies behind significant cuts to public spending and the increasing privatisation of public services (Varoufakis, 2016). Over the same period an increasing emphasis on individual resilience: the ability to cope and even thrive in the face of adversity through being psychologically strong and adaptable, has been a feature of popular culture and public policy (e.g., welfare, employment, health: see Bottrell, 2013; Bull & Allen, 2018; Neocleous, 2013). Women in particular have been targets of individual resilience messaging which is theorised to be part of a new popular form of 'neoliberal feminism' (e.g., see Banet-Weiser et al., 2020; Gill & Orgad, 2018; Rottenberg, 2014).

Encouraging women's resilience as individuals in the interests of gender equality is considered neoliberal feminism because, consistent with the neoliberal political project, a social/structural problem is reduced to a problem of individual responsibility. This neoliberal feminism thus encourages women to overcome the internal/psychological barriers that hold them back, rather than to collectively resist external/structural barriers that impede their collective advancement (Faludi, 2013; Rottenberg, 2014). This form of feminism has also

been considered part of a broader 'turn to character' within neoliberalism that helps to distract from the negative effects of reduced investment in structural supports through focusing on how disadvantaged groups, including women, can psychologically equip themselves to succeed in the face of (increasingly) adverse social conditions (Bottrell, 2013; Gill & Orgad, 2015; McRobbie, 2009; Rottenberg, 2014).

A notable example of individual resilience messages targeting women is Facebook COO Sheryl Sandberg's bestselling book *Lean In* (Gill & Orgad, 2015; Rottenberg, 2014). In *Lean In*, women are called on to follow Sandberg's example and "forge a path through the obstacles, and achieve their full potential" (Sandberg & Nell, 2013, p. 172). In recent empirical support of the negative effects of these individual resilience messages, Kim et al. (2018) found this focus did increase people's beliefs that women (rather than structural barriers) are responsible for gender inequality, and to support solutions that seek to "fix women" rather than removing structural impediments. In this research, we sought to extend these initial empirical findings, examining whether individual resilience messages may also be helping to maintain the gender status quo by undermining women's readiness for collective action. Consistent with the popular appeal of individual resilience messages, we also examined evidence for individual benefits, including increased career ambition.

Structural Barriers to Gender Equality

A number of structural barriers continue to limit women's career progression. The dominant linear model of career advancement continues to reflect the masculine norm of delegating caring responsibilities to (mostly women) partners. This disadvantages women who are more likely than men to take time off work to have, and care for, children (Schneer & Reitman, 2002). Gender stereotypes, including that women are not suited to leadership, also persist (Koenig et al., 2011) and create different performance standards for women in hiring, promotion, and job performance evaluations (Bongiorno et al., 2014; Koch et al., 2015). Women also have fewer role models, mentors and sponsors than men (Allen et al., 2004; Singh, 2006) and are at greater risk of gender-based violence including sexual

harassment and assault in educational and workplace settings and in the home (Bondestam & Lundqvist, 2020; Evans et al., 2020; Fitzgerald & Cortina, 2018).

While some women are able to achieve high-level positions, their doing so continues to rely on finding ways to navigate these and other impediments disproportionately affecting women. To minimize career interruptions, women may delay (or avoid) parenthood or have a partner or third parties who are able to do the brunt of domestic work (Fitzsimmons et al., 2014). To overcome gender discrimination in the workplace, women may attain more degrees or extra qualifying experiences relative to men to secure progression opportunities (Davies-Netzley, 1998; Lawless & Pearson, 2008). Such solutions are also more likely to be available to women from more privileged backgrounds who have greater access to resources to facilitate these structural workarounds (e.g., to pay for additional degrees, cover childcare costs).

Neoliberal feminism: Advocating Individual Resilience as the Solution to Inequality

For those women who do advance to top levels of their profession, a new brand of 'neoliberal feminism' uses women's character traits, particularly their resilience as *individuals*, to explain that success and to promote its development as a pathway to the advancement of all women (Banet-Weiser et al., 2020; Rottenberg, 2014). Bestselling self-help books written by highly-successful women, such as *Lean in* (Sandberg & Nell, 2013) and *The Confidence Code* (Kay & Shipman, 2014) are notable examples of this focus on individual resilience (Gill & Orgad, 2015; Kim et al., 2018; Rottenberg, 2014), which is also commonly seen in women's magazines and 'taught' in a proliferation of smartphone apps through scheduled 'positive affirmations' and techniques to foster gratitude (Gill & Orgad, 2015, 2018). As an illustrative example, Gill and Orgad (2018) outline articles in women's magazines that, in the context of 'Brexit' and high expected rates of redundancy for millennial women, showcase women who have been able to "bounce back" from challenges, and that advocate the need to "...adopt a resilient attitude..." and "fully embrace a constantly shifting situation and turn it into a positive" (p. 482).

This focus on individual resilience is also a feature of workplace programmes, including those designed to help women advance in their careers. Using the increasingly precarious academic sector disproportionately affecting women's jobs, Gill and Donaghue (2016) describe the emergence of well-being courses to manage the resultant stresses, including a twice weekly 'Developing Resilience One Day Workshop'. The relevance of individual women's resilience has also been given prominence in research to help explain the unusual success of women who become CEOs (e.g., Fitzsimmons et al., 2014), and comes on the back of longer history of organizations promoting gender equality through what have been termed "fix the women" (in contrast to fixing the workplace culture) programs (Kolb et al., 2003). Here, building leadership skills women are assumed to lack, including in negotiation, networking, and assertiveness (e.g., see Ely et al., 2011; Hopkins et al., 2008; Kolb et al., 2003; Kolb, 1999) has been prioritized.

Being strong and resilient are undoubtedly positive character traits and tap into notions of collective struggle by disadvantaged groups used to overcome oppression (Leach & Bou Zeineddine, in press). Yet as the literature on resilience demonstrates, a person's resilience to setbacks does not develop in a social vacuum but is facilitated by the availability of broader social and/or economic supports, including that provided by families and local communities (Bottrell, 2013). As resilience is decontextualized and individualised in the neoliberal discursive frame, it can set the stage for women's 'failures' (and particularly marginalized women's failures) to be attributed to a presumed lack of staying power rather than a lack of adequate social supports (Harrison, 2013; Jensen, 2016). Middle-to-upper class women--those who are also most likely to have the social and economic supports to facilitate resilience to career setbacks—are the typical exemplars and proponents of individual resilience as a pathway to career advancement (Gill & Orgad, 2018).

Due to its popular appeal, empirical research is starting to examine the effects of this neoliberal feminist focus on individual resilience, showing that it is likely to be undermining of women and broader gender-equality goals. In a series of experiments, Kim et al. (2018) presented participants with excerpts of the best-selling book *Lean In* (or related TED talk by

Sandberg), an exemplary case of highly successful women promoting individual resilience as the pathway to career advancement (see Rottenberg, 2014). When compared to a control, or those who read or listened to messages emphasising structural causes of gender inequality (e.g., discriminatory treatment), participants in the *Lean In* conditions were more likely to believe that women are responsible for both causing and solving gender inequality. *Lean In* messages also increased beliefs that interventions to change women (e.g., assertiveness training) rather than the system (e.g., address gender bias), were the best ways to tackle gender inequality; an effect that persisted even when this message was accompanied by acknowledgement that structural barriers hamper women's career advancement.

Effects of Individual Resilience Messages to Women's Readiness for Collective Action

A related but as yet unexplored downside to the neoliberal feminism focus on individual resilience is that it reduces women's intentions to act collectively to challenge external systems of oppression. Women's collective action, including protests and petitioning about discriminatory laws and practices, has historically led to important reforms (Maddison & Sawer, 2013). Yet such mobilization is determined, at least in part, by women attributing gender inequality to discriminatory treatment and related feelings of anger (Becker & Wright, 2011; Iyer & Ryan, 2009; van Zomeren et al., 2008). To the extent that individual resilience messages promote beliefs that the path to gender equality is for women to develop internal/psychological resources to achieve individual career goals (rather than challenging external barriers that limit their progress), they are also likely to be undermining key motivators of women's collective action.

While no prior research has examined the impact of individual resilience messages on women's collective-action intentions, research has shown that gender inequality is less likely to be attributed to discrimination the more people endorse status-legitimising ideologies that are similarly focused on the individual, including that career outcomes reflect merit (Major et al., 2002) or personal choice (Stephens & Levine, 2011). Becker and Wright (2011) have also shown that women's collective action intentions can be undermined when

they are exposed to benevolent sexism (rather than hostile sexism) that, similar to individual resilience messages, appears positive and affirming, but actually helps to maintain the gender status-quo by increasing women's acceptance of it. In the case of benevolent sexism, this is done through influencing women to believe their differences from men reflect special qualities or an important role (e.g., to be caring or 'complete' men). Exposing women to hostile sexism, which by contrast portrays women in an overtly negative light (e.g., as easily offended or prone to cat fights), motivated women's collective action because it increased their beliefs that the gender system is unfair and related feelings of anger.

We contend that individual resilience messaging undermines collective action in a similar way to other status-legitimising ideologies focused on individual responsibility (e.g., merit, choice) and benevolent sexism. Individual resilience messages appear positive and affirming, but by focusing on how women need to change themselves to achieve equality (i.e., by becoming more resilient as *individuals*), they distract from recognition of the external barriers to women's advancement that is important in motivating women's protest. And because individual resilience messages are explicitly (and likely genuinely) communicated with the goal of empowering women as individuals to achieve gender equality (Banet-Weiser et al., 2020), the negative implications of this message for positive social change is more easily obscured. Thus, unlike hostile sexism, which reflects overtly antagonistic attitudes towards women that galvanize collective protest, the positivity of individual resilience messages is likely to help mask its ultimately negative message: that for gender equality to be achieved, it is women, not the not the system, that needs to change.

Overview of the Current Studies

The aims of the current research were to examine the effects of individual resilience messages on women's collective-action intentions. Because these messages imply internal psychological obstacles limit women's career advancement, we expected that they would reduce collective-action intentions by reducing women's beliefs that gender discrimination will limit their career progression, and related feelings of anger over gender inequality. In addition to the negative predicted effects on women's collective-action intentions, we

examined potentially positive effects on women as individuals. As these messages have been popular and can be seen as inspiring and affirming, we examined individual benefits, including an increased sense of personal control and career ambition.

We conducted three studies in the UK to examine our research aims. In Studies 1 and 2 we sampled from British women currently enrolled in tertiary education and in Study 3 we sampled from women university graduates employed in the UK. We considered these populations of women suitable because they represent the “aspirational” women who, by virtue of the career advancement opportunities professional qualifications (should) afford, they are the typical targets and consumers of the popular neoliberal feminist message we were interested to examine here (Gill & Orgad; 2015, 2018).

Participants were first presented with gender-inequality statistics, including the high percentages of women in higher education relative to the low percentages of women in top-level professional positions. Participants in the control condition then completed outcome measures, while participants in resilience conditions then read messages advocating resilience as a pathway to career advancement before completing outcome measures. In Study 1, we used two resilience conditions, one describing a successful resilient women and one that also included resilience advice. In Studies 2 and 3, a third resilience condition separated resilience advice from information about a successful resilient woman.

Study 1

Design and Hypotheses

In Study 1, we used a between-participant design. The independent variable had three levels: The no-resilience control, and the two resilience conditions: a “part” condition, that included a description of a woman who achieves career success despite exceptionally difficult personal circumstances (Successful Resilient Woman) and a “combined” description, where the same business woman provides resilience advice aimed at helping other women achieve success (Successful Resilient Woman + Resilience Advice). Using these two resilience conditions allowed us to examine the impact of explicit resilience advice in addition to a description of a woman who achieves career success against the odds (i.e., a woman

who embodies resilience, without providing advice about how to be resilient). The dependent variables were anticipated gender discrimination, anger about gender inequality and collective-action intentions, along with personal control and career ambition.

Our hypotheses were as follows:

H1: When compared to the control condition, participants in the resilience conditions [with or without resilience advice] will report less anger about ongoing inequality, less anticipated gender discrimination, and have lower collective-action intentions.

H2: Lower collective-action intentions for participants in the resilience conditions compared to the control condition, will be mediated by less anger about gender inequality and lower anticipated future gender discrimination.

We did not make hypotheses about whether participants in the two resilience conditions would differ on collective-action intentions, anger about inequality, and anticipated future discrimination. Nor did we make predictions about the effects of resilience conditions compared to the control condition on participants' personal control and career ambition.

Method

Participants

From our target population of British women currently enrolled in higher education, we retained 219 participants ($M_{\text{age}} = 20.05$, $SD = 1.57$; 92.2% White, 3.7% Asian, 2.3% Black, 1.8% mixed ethnicity; see Supplementary Materials for full details of exclusions and Supplementary Table S1 for full demographics). Participants were recruited to a study on “gender and society” from the first year psychology participant pool at a university in England and received course credit. Additional participants were recruited by being approached on campus or via links posted on student-facing online sites

Materials and Procedure

The study was conducted in compliance with approval from the College of Life and Environmental Science – Psychology Ethics Committee (eCLESPsy000393). The questionnaire was administered online using Qualtrics survey software. The first page contained background information about the research, followed by a page where participants

provided informed consent by clicking several checkboxes. To reduce suspicion, participants were provided with a cover story about the research aims. They were told that in Part A, we were interested in how people process and recall information about gender in society and that they would be asked to read and recall information about gender before being asked some questions to examine their recollection. They were told that in Part B, they would be asked questions about their own futures and beliefs about how society functions).

Information about Gender Inequality. All participants were then directed to a page with societal-level information about gender. They read that despite the UK outlawing discrimination over 40 years ago, in virtually every profession, men continue to outnumber women at the top, and gender statistics in the fields of law, business, politics and medicine were presented (e.g., “Medicine: 55% of medical students and 52% of GPs are women, yet only 34% of those on the Specialist Register and 11% of consultant surgeons are women). On the next page, we used four multiple-choice questions to test participants attention to the materials and recollection (e.g., “What percentage of consultant surgeons are women? ‘11%’, ‘22%’, ‘40%’”). Participants in the control condition were then directed to Part B.

Resilience Manipulations. Participants in the two resilience conditions were then directed to a page informing them that they would now be asked to read some individual-level information about gender before answering some questions to test their recollection. To maximise external validity, we adapted text for the resilience manipulations from a genuine communication in a University setting about an inspiring women speaker series. The description was similar in tone and content to the individual resilience messages described by Gill and Orgad (2018), whereby a business women is profiled who has achieved carer success despite exceptionally difficult circumstances.

On the next page, participants were told that they had been randomly allocated to read about a businesswoman [name redacted]. In both resilience conditions, participants read a paragraph that described the career of a highly successful business woman who had delivered outstanding results leading a team in the “hard-node investment banking and private equity worlds”. She had been celebrated as a “standout performer” and recognised

as a “Rising Star”. She was described as achieving this career success “all whilst being a single mother of twin girls, one of whom has a disability”. In the “combined” resilience condition, participants read a second paragraph that described the business woman subsequently founding a women’s empowerment consultancy company that provides “advice to women about how to achieve career success through adopting the right attitudes and approaches to their careers”. The business woman was also described as having written a bestselling book “Grit” to help women overcome career limiting “self-doubts” and “inspiring them to believe they can achieve whatever they put their minds to”.

Following this information, three multiple-choice questions common across the resilience conditions were used to examine participant’s recollection and attention to the materials (e.g., “Was [name redacted] named a ‘Rising Star’ by Business Review Weekly? ‘Yes’, ‘No’”). Participants in the “combined” condition answered a fourth question on information specific to this condition (i.e., “[name redacted’s] book ‘Grit’ was first released in 2008. True or false? ‘True’, ‘False’”). Participants were then directed to Part B (see Supplementary Materials for full details of all measures).

Measures

In Part B, participants answered measures about collective action, personal control and career ambition. These measures were interspersed with others for descriptive and exploratory purposes. We used multiple items for all measures and composite scores were calculated as means. Unless otherwise indicated, participants responded to all items on a 7-point scale, ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*).

Collective Action Measures.

Collective-Action Intentions. We used twelve items developed by Kelly and Breinlinger (1995) to measure intentions to engage in actions to promote gender equality. We asked participants: “How likely is it that you will engage in the following actions to progress the cause for gender equality”. Items related to different types of actions, including: participation in women’s groups (4 items, e.g., “act as a spokesperson for a particular women’s issue”); collective protest (3 items, e.g. “Take part in a rally or demonstration”);

informal participation (2 items, e.g., discuss women's issues with friends or colleagues); and individual protest (3 items, e.g., Sign a petition). Participants responded on a 7-point scale, ranging from 1 (*Not at all likely*) to 7 (*Very likely*). A factor analysis (principal axis factoring) identified a single factor explaining 53.71 % of the variance. All items loaded above .5 on this factor, and were combined into a single scale ($\alpha = .92$), with higher scores indicating greater collective-action intentions.

Anticipated Gender Discrimination. We used five items drawn from Begeny and Huo (2018) to measure participants' expectations that they would face gender discrimination in the future (e.g. "Thinking about your future, do you think you will be: 'discriminated against because of your gender?'" ($\alpha = .87$). Participants responded on a 5-point scale, ranging from 1 (*Never*) to 5 (*Very often*). With higher scores representing greater expectations of facing gender discrimination in the future.

Anger about Gender Inequality. To measure anger about gender inequality, we used four items from van Zomeren et al. (2004): "angry" "irritated", "furious", "displeased" ($\alpha = .91$). We asked participants: "When you consider that there continuing gender-based inequalities, to what extent do you feel..." Participants responded on a 7-point scale, ranging from 1 (*Not at all*) to 7 (*Very much*), with higher scores representing greater anger.

Individual Benefits Measures.

Personal Control. To examine perceived control over life outcomes, we used six items drawn from Lachman and Weaver (1998). Three items related to mastery (e.g., "I can do just about anything I set my mind to") and three items related to constraints (e.g., "I have little control over the things that happen to me"). The three constraints items were reverse scored and the six items were combined into a scale ($\alpha = .75$), with higher scores indicating greater control over one's life outcomes.

Career Ambition. We examined participants' career ambition using five items from Duckworth et al. (2007) (e.g., "I aim to be the best in the world at what I do"; $\alpha = .78$) with higher scores indicating greater career ambition.

Demographics and Additional Measures. At the end of the questionnaire, participants completed demographic items, including their gender, age, British citizenship, ethnic background, student status, employment status. Finally, we asked participants a suspicion check question (“What do you think the purpose of this study was?”) and provided a space for any additional comments about the study. Upon completion of the questionnaire, participants were taken to the debriefing page. Other measures included in the questionnaire were about past action in support of feminism and feminist identification (Leach et al., 2008); modern sexism (Swim et al., 1995), belief in a meritocracy (Garcia, 2001) (See Supplementary Materials for full details of all measures).

Results

Preliminary Analyses of Manipulations and Measures

We first examined participant's responses to the memory questions about the gender inequality statistics. Aside from Question 1, the majority of participants answered each question correctly (47%; 76%; 66%; and 66%, Questions 1-4 respectively). The relatively lower proportion of correct answers to Question 1 is likely to be a result of a list of very similar percentages of women in various levels of government being presented close together. We found no significant difference in the average number of correct responses to these 4 questions (around 2.5) across the three conditions, $F(2,16) = .17, p = .846$ (Control: $M = 2.61, SD = .95$; SRW: $M = 2.51, SD = 1.17$; SRW+RA: $M = 2.54, SD = 1.04$).

We then assessed responses to the questions about the resilience information. For the three questions common to both conditions, the majority of participants answered correctly (SRW: 75%, 85%, 73%; SRW+RA: 69%, 78%, 62%, Questions 1-3 respectively). There were no significant difference across conditions in the number of correct responses (around 2), $t(141) = 1.72, p = .088$: SRW: $M = 2.33, SD = .74$; SRW+RA: $M = 2.09, SD = .96$). For participants in the “combined” resilience condition, 85% correctly answered the fourth question specific to this condition.

Correlations. Table 1 shows the correlations between the measures of anticipated gender discrimination, anger at inequality, collective-action intentions, personal control, and

career ambition. Collective-action intentions were positively correlated with anticipated gender discrimination and anger at gender inequality. Personal control and career ambition were also positively correlated, such that women with higher personal control also reported higher career ambition. There was a small negative correlation between personal control and anticipated gender discrimination. The measures with the highest correlation were collective-action intentions and anger about gender inequality ($r = .68$).

Tests of Hypotheses

Hypothesis 1. To examine Hypothesis 1, we conducted planned comparisons between the control and resilience conditions combined for collective-action intentions, anticipated gender discrimination and anger about gender inequality (see Table 1 for Means [SDs]). Inconsistent with predictions, collective-action intentions for participants in resilience compared to control conditions were not significantly lower, $t(216) = -1.83$, $p = .068$, 95% CI [-1.30, .05], Cohen's $d = .52$. Consistent with predictions, participants in the resilience conditions compared to control condition anticipated significantly less gender discrimination, $t(216) = -3.18$, $p = .002$, 95% CI [-1.47, -.34], Cohen's $d = .90$, and were significantly less angry about gender inequality $t(216) = -2.02$, $p = .044$, 95% CI [-1.13, -.01], Cohen's $d = .57$.

Hypothesis 2. To examine Hypothesis 2, we used multiple mediation with Hayes' (2013) PROCESS macro for SPSS (with 5000 bootstrap samples), including anger at inequality and anticipated gender discrimination as parallel mediators. As shown in Figure 1, when both mediators were entered into the model there was a negative indirect effect of the resilience messages (compared to control) on participants' collective-action intentions, via lower anticipated gender discrimination 95% CI [-.26, -.04] and lower anger at gender inequality 95% CI [-.38, -.01].

Exploratory Analyses

We compared the two resilience conditions on the three collective action measures (see Table 1 for Means [SDs]) to examine greater negative effects of the "combined" (Successful Resilient Woman + Resilience Advice) compared to "part" (Successful Resilient Woman) resilience condition. We did not find significant differences for collective-action

intentions, $t(216) = -1.85$, $p = .065$, 95% CI [-.64, .02], Cohen's $d = .31$; anticipated gender discrimination, $t(216) = -.87$, $p = .38$, 95% CI [-.48, .18], Cohen's $d = .15$; or anger about gender inequality, $t(216) = -1.12$, $p = .265$, 95% CI [-.52, .14], Cohen's $d = .19$. We also examined possible linear effects of the resilience information, which revealed that as information about resilience increased from “none” (Control), to “part” (Successful Resilient Woman) to “combined” (Successful Resilient Woman + Resilience Advice), there was a proportionate reduction in participants collective-action intentions, $F(1, 216) = 6.20$, $p = .014$., anticipated gender discrimination, $F(1, 216) = 9.89$, $p = .002$; and anger about gender inequality, $F(1, 216) = 5.21$, $p = .024$.

We then examined possible positive effects (individual benefits) of the resilience conditions compared to the control for personal control and career ambition (see Table 1 for Means [SDs]). We compared the control condition to the two resilience conditions combined, finding no significant differences for personal control, $t(216) = .70$, $p = .48$, 95% CI [-.36, .76], Cohen's $d = .20$, or career ambition, $t(216) = -.06$, $p = .95$, 95% CI [-.58, .54], Cohen's $d = .02$. We also compared the two resilience conditions, finding no significant difference for personal control, $t(216) = .44$, $p = .66$, 95% CI [-.26, .40];Cohen's $d = .07$, or career ambition, $t(216) = .92$, $p = .361$, 95% CI [-.18, .48], Cohen's $d = .15$. Nor were there linear effects, with linear trend analyses showing that as information about resilience increased from none (Control), to “part” (Successful Resilient Woman) to “combined” (Successful Resilient Woman + Resilience Advice), there was no significant proportionate increase in participants sense of personal control, $F(1, 216) = .67$, $p = .41$, or career ambition, $F(1, 216) = .16$, $p = .69$.

Discussion

In Study 1, we found support for our hypotheses that messages promoting individual resilience would lower women's readiness for collective action. In support of Hypothesis 1, we found that participants in the individual resilience conditions were less angry about gender inequality and expected less gender discrimination in their future compared to participants who did not read the resilience messages but only saw information about gender

inequality. While the expected difference for collective-action intentions was not significant, examining support for the hypothesised mediation model (Hypothesis 2), we found a negative indirect effect: participants in the resilience conditions, compared to control, had lower collective-action intentions due to feeling lesser anger about gender inequality and anticipating less gender discrimination in their future.

In exploratory analyses comparing the two resilience conditions directly, we did not find significant differences for the collective-action measures. However, linear analyses revealed that as information about resilience increased, there was a proportionate reduction in participants' anticipated gender discrimination, anger about gender inequality, and collective-action intentions. One interpretation of this finding is that resilience advice, when coupled with information about a successful resilient woman, is additionally undermining of women's readiness for collective action. However, it is also possible that extra information about the career success of the business woman in the combined condition accounted for these findings (i.e., because extra information was introduced about her achievements). We address this design shortcoming in Studies 2 and 3.

Results from the exploratory analyses relating to individual benefits, namely personal control and career ambition, found no differences across conditions. Thus, we did not find that individual resilience messages had significant positive effects for women by increasing their sense of personal control or career ambition. In sum, our results showed that individual resilience messages can undermine women's collective-action intentions, without positive compensatory 'individual benefits', including a greater sense of personal control or career ambition.

Studies 2 and 3

In Studies 2 and 3, we sought to extend Study 1 findings by addressing design shortcoming and including an additional individual resilience message condition. To address design shortcomings, we designed the "combined" condition (Successful Resilient Woman + Resilience Advice) so that it only conveyed resilience advice, not additional information about the career success of the resilient woman. We also included an additional resilience

condition that only included resilience advice. Messages promoting women's individual resilience are often, but not always, accompanied by information about a successful resilient women (Gill & Orgad, 2018). By including the resilience advice only condition, we could explore potential effects relating to different forms of presentation, although we did not make specific predictions.

In Study 2, we again sampled from undergraduate women, but in Study 3, we sampled from currently employed women living in the UK who were university graduates. Employed professional women are arguably the most relevant sample to examine our collective action hypotheses. In this sample, we could ask about actual (rather than anticipated) workplace gender discrimination, which may be less influenced by the individual resilience messages. This would provide a more stringent test of potentially negative effects of individual resilience messages to women's collective-action intentions via reduced perceptions of gender discrimination. Before Study 3, we also conducted a pilot test which confirmed that the resilience descriptions (both with and without mention of a successful resilient women) conveyed the intended message that if women are resilient, they can be successful. The pilot test also confirmed that each of these descriptions were seen as 'feminist', 'positive' and 'inspiring' (see Supplementary Materials for analyses).

In Study 3, we also included a new scale of "self-help" strategies, reflecting programs women are offered in the workplace to assist their career advancement. We also used the pilot test to establish this scale as valid and reliable for professional women (see Supplementary Materials for analyses). This additional measure was to supplement the personal control and career ambition items used in Studies 1 and 2. We included it because it was more relevant to working women and consistent with the kinds of behaviours that are encouraged by the individual resilience messages. Thus, we could examine potential effects of the resilience messages on women's intentions to engage in these "fix the woman" type programs, relevant for the working sample.

Design and Hypotheses

For both studies, we used the same between-participant design. The independent variable had four levels: (1) a no-resilience control, whereby participants only receive information about gender inequality, and three additional resilience conditions, two “part” conditions, with a description of either: (2) a successful resilient woman (Successful Resilient Woman); or (3) a women’s empowerment company that teaches resilience (Resilience Advice); or (4) a “combined” condition, with a description of a successful resilient woman who endorses the women’s empowerment company (Successful Resilient Woman + Resilience Advice).

Our hypotheses were as follows:

H1: Compared to control, participants in the resilience conditions will report lower collective-action intentions, less anticipated (Study 2) or perceived (Study 3) gender discrimination, and less anger about inequality.ⁱ

H2: There will be a significant linear relationship across conditions, such that collective-action intentions, anticipated/perceived gender discrimination and anger about gender inequality, will reduce proportionately as information about resilience increases from no information (control) to part information (successful resilient woman or resilience advice) to combined information (successful resilient woman + resilience advice).

H3: Lower collective-action intentions for participants in the resilience conditions, compared to control, will be mediated by lower perceived gender discrimination less anger about gender inequality.ⁱⁱ

We do not make hypotheses about the effects of the resilience information on personal control or career ambition, or for the additional measure of self-help strategies used in Study 3.

Method

Sample Size Determination

Using the Study 1 effect size for collective action from our first Study 1 (Partial eta squared = .03), we used G*Power (Faul et al., 2007) to determine the sample size required to detect a similar effect size using adequate power (0.80) in Study 2, and used increased

power (0.90) in Study 3. For Study 2, this indicated 75 participants per cell and for Study 3, 116 participants per cell. With a four cell design, our Study 2 target sample was 300 and our Study 3 target sample was 464. For Study 2, we aimed to recruit a sample 30% higher (390 participants) to account for potential comprehension and suspicion check failures and for participants who did not meet the inclusion criteria. For Study 3 we aimed to recruit a sample 10% higher (510 participants), as we expected fewer participants would need to be excluded because we were only using Prolific to recruit participants and could therefore apply screening criteria prior to participation.

Participants

Study 2.

Five-hundred and one participants completed this research. After applying our pre-registered inclusion criteria for survey completion, demographics, comprehension checks and a suspicion check, we retained 309 participants ($M_{age} = 21.46$, $SD = 6.13$; 90% White, 5.2% Asian, 1.9% Black and 2.6% mixed ethnicity (see Supplementary Materials for full details of exclusions and Supplementary Table S2 for full demographics). Participants were recruited in two ways: 1) from the first year psychology participant pools at two British universities and received course credit; and 2) via Prolific and received reimbursement equivalent to the UK living wage of £9 per hour.

Study 3.

Five-hundred and nineteen participants completed this research and after applying our pre-registered inclusion criteria for survey completion, demographics, comprehension checks and a suspicion check, we retained 421 participants (413 women, 8 non-binary; $M_{age} = 32.75$, $SD = 7.61$; 86.7% White, 5.2% Asian, 2.6% Black and 4.3% mixed ethnicity (see Supplementary Materials for full details of exclusions and Supplementary Table S2 for full demographics). Participants were recruited from Prolific and received reimbursement equivalent to the UK living wage of £9 per hour.

Materials and Procedure

Studies 2 and 3 were preregistered:

(https://osf.io/5hspn/?view_only=cbb7fe36e0494dc5a805c83fcd086c41)

and conducted in compliance with approval from the College of Life and Environmental Science – Psychology Ethics Committee (eCLESPsy000159). The materials and procedure were similar to Study 1, except for the following changes. For each study, we updated information about gender inequality to ensure it was accurate at the time of the study (e.g., to reflect changes in proportions of female cabinet ministers). We also removed one of the four memory questions used in Study 1 because results suggested it was too difficult to be a good reflection of participants having read the information.

In the new ‘Resilience Advice’ condition, we adapted information about resilience in Study 1 by removing information that linked this advice to a successful resilient woman. Thus, we only included information about a women’s empowerment consultancy company that provides “advice to women about how to achieve career success through adopting the right attitudes and approaches to their careers” with staff described as recently endorsing the guidebook “Grit” to help women overcome career-limiting “self-doubts” by “inspiring them to believe they can achieve whatever they put their minds to”.

For the ‘Successful Resilient Women’ condition, we included a new final sentence about her current professional role heading up the “risk strategy for a major UK insurance company” and being “one of the few women board members in the industry”. This was to ensure equivalent career information (i.e., including her current role) was presented across this and the combined condition. In Study 1, current career information had been missing from this condition, as it was intertwined with the resilience advice presented in the combined condition.

In the “combined” Successful Resilient Women + Resilience Advice’ condition, participants received the same information provided to participants in the ‘Successful Resilient Woman’ condition, along with the information in the ‘Resilience Advice’ condition that we adapted to show the business woman’s association with this company and endorsement of its approach (e.g., “[name redacted] is also associated with [name

redacted], a woman's empowerment consultancy company..."). Thus, we ensured that the resilience advice information was not simultaneously communicating information about the business woman's career success, as it had in Study 1.

To check participants' recollection of the resilience information, two questions were used in the "single" "Successful Resilient Women" and "Resilience Advice" resilience conditions, adapting question from Study 1 where appropriate (e.g., "*Was [name redacted] named a 'Rising Star' by Business Review Weekly? 'Definitely yes', 'Probably yes', 'Probably not', 'Definitely not'*"; "*[name redacted] endorsed a guidebook to help women identify and overcome self-doubts that might be holding them back. What was the guidebook called? 'Anticipation', 'Grit', 'Foresight'*"). Participants in "Successful Resilient Women + Resilience Advice" condition received both sets of questions (four in total).

Measures

Following the first part of the questionnaire, participants completed the same measures relating to collective action and individual benefits used in Study 1 as well as the same additional measures, demographics and suspicion check items, prior to the debriefing page. We detail additional measures and any necessary adjustments to measures across studies below.

Study 2

Participants completed the same items to Study 1 measuring personal control ($\alpha = .76$), career ambition ($\alpha = .81$), anger at inequality ($\alpha = .90$), anticipated future discrimination ($\alpha = .89$), and collective-action intentions ($\alpha = .93$). For the demographic question about gender identity, we updated it to include additional response options of "Trans" and "Genderqueer/Non-binary".

Study 3

Participants completed the same items to Study 1 relating to personal control ($\alpha = .76$), career ambition ($\alpha = .81$), anger at inequality ($\alpha = .90$), and collective-action intentions ($\alpha = .93$). For this working (versus student) sample, the anticipated gender discrimination question was adjusted to relate to perceived workplace discrimination (e.g., "Thinking about

your working life, how often have you felt that you were...deprived of certain opportunities (available to others) because of your gender?" ($\alpha = .89$)). The new measure of "self-help" strategies included 7 items (e.g., "To assist you in your career goals, how likely would you be to engage in the following actions? Attend a training course on building self-confidence in the workplace"; $\alpha = .93$). Participants responded on a 7-point scale, ranging from 1 (Very unlikely) to 7 (*Very likely*), with higher scores representing greater intentions to engage in self-help strategies. A range of additional demographic and workplace items were also included to appropriately describe this sample (i.e., parental status, relationship status, primary caregiving, years in the workplace, managerial status, female-dominance of the industry they worked in, how far they have come towards achieving their career goals) (see Supplementary Materials for full details of all measures included).

Results

Preliminary Analyses of Manipulations and Measures

Study 2. Of the 309 participants we retained (139 course credit; 170 Prolific), we had similar numbers of participants across conditions (see Table 2) and for two recruitment methods (control: 42 course credit, 37 Prolific; SRW: 32 course credit, 46 Prolific; RA: 31 course credit, 45 Prolific; SRW + RA: 34 course, 42 Prolific). There were no effects associated with the recruitment method.

Study 3. Of the 421 participants we retained, there were similar numbers of participants across conditions (see Table 2).

Correlations. Table 2 shows the correlations between the measures of collective-action intentions, anger at inequality, anticipated gender discrimination, control and ambition for both studies, and for the additional measure of intentions use self-help strategies in Study 3. Collective-action intentions were positively correlated with anger at inequality, anticipated (Study 2) and perceived (Study 3) gender discrimination, career ambition and self-help intentions (Study 3). Personal control and career ambition were positively correlated in both studies. There was a negative correlation between personal control and anticipated gender discrimination (Study 2) and perceived gender discrimination (Study 3). In Study 3, there

was also a negative correlation between personal control and anger at gender inequality.

The measures with the highest correlations across studies were collective-action intentions and anger about gender inequality (Study 2, $r = .64$; Study 3, $r = .67$).

Tests of Hypotheses

Hypothesis 1. In both studies, we conducted planned comparisons between the control and resilience conditions combined for the measures of anticipated gender discrimination, anger about gender inequality and collective-action intentions (see Table 2 for Means [SDs]).

Study 2. Inconsistent with predictions, the resilience conditions did not differ significantly to the control for collective-action intentions: $t(305) = 1.65$, $p = .100$, 95% CI [-.41, .86], Cohen's $d = .23$; anticipated gender discrimination: $t(305) = .62$, $p = .536$, 95%CI [-.53, .75], Cohen's $d = .11$; or anger about inequality, $t(305) = .84$, $p = .403$, 95%CI [-.41, .87], Cohen's $d = .23$.

Study 3. Consistent with predictions, collective-action intentions were lower in the resilience conditions compared to the control: $t(417) = -2.16$, $p = .031$, 95% CI [-1.39, -.07], Cohen's $d = .73$. Inconsistent with predictions, the resilience conditions did not differ significantly to the control for perceived gender discrimination: $t(417) = -1.12$, $p = .263$, 95%CI [-1.04, .28], Cohen's $d = .38$, or anger about inequality, $t(417) = -.463$, $p = .644$, 95%CI [-.81, .50], Cohen's $d = .16$.

Hypothesis 2. To examine Hypothesis 2, we ran two linear trend analyses in both studies, examining whether a proportionate increase in information about resilience led to a proportionate decrease in collective-action intentions, anticipated gender discrimination, anger at inequality. The first, mirroring Study 1, involved participants in the Control (none), Successful Resilient Woman (part) and Successful Resilient Woman + Resilience Advice (combined) resilience conditions. The second involved participants in the Control (none), Resilience Advice (part) and Successful Resilient Woman + Resilience Advice (combined) conditions.

Study 2. Results from first linear trend analyses (i.e., using the Successful Resilient Women as the “part” condition) did not support predictions. As information about resilience increased there was a no proportionate reduction in: collective-action intentions $F(1, 230) = 1.02, p = .318$; anticipated gender discrimination, $F(1, 230) = 1.22, p = .27$; or anger about inequality, $F(1, 230) = .23, p = .63$. This was also the finding for the second linear trend analyses (i.e., using Resilience Advice as the “part” condition): collective-action intentions, $F(1, 228) = 1.96, p = .163$; anticipated gender discrimination, $F(1, 228) = 1.22, p = .27$; anger about inequality, $F(1, 228) = .26, p = .614$.

Study 3. Results from first linear trend analyses (i.e., using the Successful Resilient Women as the “part” condition) did not support predictions. As information about resilience increased there was not a proportionate reduction in: collective-action intentions: $F(1, 316) = 3.75, p = .054$, anticipated gender discrimination, $F(1, 316) = .79, p = .375$; or anger about inequality, $F(1, 316) = .38, p = .538$. This was also the finding for the second linear trend analyses (i.e., using Resilience Advice as the “part” condition): collective-action intentions, $F(1, 311) = 3.83, p = .051$; anticipated gender discrimination, $F(1, 311) = .80, p = .371$; anger about inequality, $F(1, 311) = .38, p = .539$.

Hypothesis 3. To examine hypothesis 3, we used multiple mediation with Hayes' (2013) PROCESS macro for SPSS (with 5000 bootstrap samples), including anger at inequality and anticipated (Study 2) or perceived (Study 3) gender discrimination as parallel mediators.

Study 2. As shown in Figure 2, our mediation predictions were not supported: anger at gender inequality and anticipated gender inequality were significant predictors of collective-action intentions, but did not mediate a negative predicted effect of the resilience conditions compared to the control on participants collective-action intentions. This was indicated by 95% confidence intervals that did include zero (anger at inequality: $[-.09, .27]$; anticipated gender discrimination: $[-.06, .10]$).

Study 3. As shown in figure 3, our mediation predictions were not supported. The resilience messages (compared to control) had a negative effect on collective-action

intentions (mirroring the results from the planned contrasts) that was not mediated by lesser perceived gender discrimination or lesser anger about gender inequality, as indicated by 95% confidence intervals for these measures that did include zero (anger at inequality: [-.24, .11]; anticipated gender discrimination: [-.12, .02]).

Exploratory Analyses

For both studies, we also made comparisons between the resilience conditions on the three measures relating to collective action and found no significant differences (see Supplementary Materials for analyses).

We then examined potential positive effects of individual resilience messages to participant's sense of personal control and career ambition for Studies 2 and 3, and using the additional measures of self-help strategies for Study 3 (see Table 2 for Means [*SDs*]). We examined first the results for all measures through comparing the control to the resilience conditions combined. We then examined whether there were linear effects through linear trend analyses (additional analyses making direct comparisons between the resilience conditions are reported in Supplementary Materials).

Study 2. For both personal control and career ambition, comparisons between the control and combined resilience conditions were not significant: personal control: $t(305) = -1.84, p = .067, 95\% \text{ CI } [-1.25, .03], \text{Cohen's } d = .61$; career ambition: $t(299) = -1.91, p = .058, 95\% \text{ CI } [-1.06, .21], \text{Cohen's } d = .42$. We then ran two sets of linear trend analyses. The first set used the Successful Resilient Woman condition as the “part” resilience information condition, the second set used the Resilience Advice condition as the “part” resilience information condition (in comparison to the Control “none” and the Successful Resilient Woman + Resilience Advice “combined” resilience information conditions). Results from first analyses showed that as information about resilience increased, there was a proportionate decrease in participants reported personal control, $F(1, 230) = 5.33, p = .022$, and career ambition, $F(1, 230) = 5.27, p = .023$. The same finding was observed for the second set of analyses for personal control: $F(1, 228) = 5.79, p = .017$, and career ambition, $F(1, 228) = 5.78, p = .017$ (see Table 2 for Means [*SDs*]).

Study 3. For personal control, career ambition and self-help strategies, comparisons between the control and combined resilience conditions were not significant: personal control: $t(417) = .90, p = .364, 95\% \text{ CI } [-.35, .96], \text{Cohen's } d = .31$; career ambition: $t(417) = .57, p = .573, 95\% \text{ CI } [-.47, .85], \text{Cohen's } d = .19$; self-help strategies, $t(417) = .26, p = .793, 95\% \text{ CI } [-.57, .75], \text{Cohen's } d = .09$. We then ran two sets of linear trend analyses. The first used the Successful Resilient Woman condition as the “part” resilience information condition, the second set used the Resilience Advice condition as the “part” resilience information condition (in comparison to the Control “none” and the Successful Resilient Woman + Resilience Advice “combined” resilience information conditions). Results from the first analyses showed that as information about resilience increased, there was no significant proportionate decrease in participants reported personal control, $F(1, 316) = 1.00, p = .319$, career ambition, $F(1, 316) = .00, p = .974$, or self-help strategies, $F(1, 316) = .27, p = .602$. The same finding was observed for the second set analyses for personal control: $F(1, 311) = .95, p = .330$, career ambition, $F(1, 311) = .00, p = .978$, and self-help strategies $F(1, 311) = .25, p = .62$ (see Table 2 for Means [*SDs*]).

Discussion

Results from Study 2 and 3 provide mixed support for our hypothesis of negative effects of individual resilience messages on measures relating to women’s collective action. In Study 3, but not Study 2, there was a direct negative effect of individual resilience messages on participant’s collective-action intentions, supporting Hypothesis 1. However, across studies 2 and 3, and inconsistent with Hypothesis 1 for anticipated (Study 2) or actual (Study 3) gender discrimination and anger about gender inequality, there were no significant negative effect of individual resilience messages, and nor was the predicted mediation model supported (Hypothesis 3).

Inconsistent with Hypothesis 2 and Study 1 findings, we did not find that as information about resilience increased from none (control) to part (Successful Resilient Woman or Resilience Advice) to combined (Successful Resilient Woman + Resilience Advice), that there was a proportionate reduction in anger at inequality, anticipated

discrimination, or collective-action intentions. This suggests that negative linear effects found in Study 1 may have occurred due to greater information about the career success of the resilient woman, which was removed from the combined condition in Studies 2 and 3.

Results from Study 2 and 3 also provide mixed evidence of negative effects of individual resilience messages on individual benefits to women. In Study 2 but not Study 3, exploratory analyses revealed that as information about resilience increased there was a proportionate reduction in participants' sense personal control and career ambition. Thus, rather than leading women to feel more individually empowered, our findings suggest that individual resilience messages risk disempowering women as individuals, potentially because they convey the sense that success is only possible for women who are capable of being particularly resilient to adversity.

General Discussion

The aim of our research was to examine whether messages promoting individual resilience, part of a newly identified 'neoliberal feminism' (Gill & Orgad, 2018; Rottenberg, 2014) undermine women's readiness for collective action. We found support for our collective action hypotheses in one of two studies using undergraduate samples (Study 1 but not Study 2), and in a graduate employed sample of women (Study 3). In Study 1, the negative effect of individual resilience messages on women's collective-action intentions was indirect, mediated through lower anticipated gender discrimination and lower anger about gender inequality, while in Study 3 the negative effect was direct. Together, the findings suggest that at best, individual resilience messages are not motivating women to engage in collective action, and at worst, are undermining women's intentions to take collective action in response to gender inequality (e.g., attend protests about women's rights).

As individual resilience messages aim to inspire women's beliefs that they can succeed despite setbacks if they are psychologically strong, we used exploratory analyses to examine possible 'individual benefits' relating to an increased sense of personal control, career ambition and in Study 3, intentions to engage in self-help strategies to assist with career development (i.e., assertiveness training). In Studies 1 and 3, we did not evidence for

effects of individual resilience messages on these measures. However in Study 2, we found that as information about resilience increased, there was a proportionate reduction in women's sense of personal control and career ambition. In sum, we found that individual resilience messages are likely to be having a 'collective cost' for women through reducing their intentions to engage in collective action, without evidence of 'individual benefits' in terms of boosting a sense of personal control, career ambition or intentions to engage in self-help strategies that may be productive to some women's career advancement.

Practical Implications

Promoting individual resilience to advance gender equality has been a popular feminist message (Gill & Orgad, 2018), so it is important to study its assumed benefits and to also understand potential downsides of this aspect of neoliberal feminism. Some prior experimental research by Kim et al. (2018) found that similar individual resilience messages (*Lean In*) to those used in the current research increased perceptions that women are responsible for gender inequality and to support interventions to change women, not the system. As women's collective action has historically led to important structural reforms (Maddison & Sawyer, 2013), here we show another way this focus may inadvertently be helping to maintain the status quo: by reducing women's collective-action intentions. From a practical standpoint, replacing individual resilience messages with those that are focused on mobilising women (and others) to challenge structural barriers to gender equality, may be a more productive pathway to creating real and lasting change.

While we did not predict 'individual benefits' of individual resilience messages, that we only found negative effects (i.e., reducing women's sense of personal control and career ambition in Study 2) further underscores the need to limit a focus on promoting women's individual resilience as a way to promote gender equality. It has been theorised that these messages are popular because they are affirming and may provide a psychological boost to women who may be struggling with career and other setbacks (Gill & Orgad, 2018). Yet as with findings showing that unattainable role models can be de-motivating (Lockwood & Kunda, 1997) our Study 2 findings suggest that individual resilience messages may instead

undermine at least some women's beliefs that they have what it takes to get ahead. In the absence of any discernible positive effects, these findings further underscore the need to challenge individual resilience messages as a way to help women and the broader gender-equality cause.

Limitations and Future Directions

While we did not find individual resilience messages had positive effects in terms of boosting personal control, career ambition or women's intentions to engage with "self-help" strategies, women's scores on these measures were relatively high overall, suggesting there may have been limited room for positive influence. It is also possible that such messages do provide a psychological boost for some women in some contexts, perhaps especially after a career or other life setback, and evidence for this could be explored in future research. Moreover, collective actions to challenge group-based disadvantage, representing a more productive-to-social-change coping strategy for disadvantaged group members (see van Zomeren et al., 2012), are often unavailable, including because they may come at too great a personal cost (for a discussion of alternative forms of resistance, see Leach & Livingstone, 2015). Thus, while we acknowledge a place for more individual coping strategies, including building psychological strength to setbacks, more research is needed to establish how the use of resilience messaging can be presented in a way that does not also subtly shift blame for inequality onto women (see Kim et al., 2018). Messages that acknowledge how resilience is built through access to social and other supports is likely to be important to this.

Our findings are limited to the UK context and our samples were relatively privileged women (and a small number who identified as non-binary): those either enrolled in university, or employed graduates and most also identified their ethnic background as White. Our rationale for targeting undergraduate and graduate employed women was that these samples fit the typically middle-to-upper-class "aspirational" women to whom these individual resilience messages are marketed (see Banet-Weiser et al., 2020). At the same time, policy and interventions to build individual resilience are also considered relevant for women and others from poorer, more marginalised communities (Harrison, 2013; Jensen, 2016). And

research in the US has shown negative effects of a similarly individually focused Strong Black Woman (SBW) schema to Black women's psychological outcomes, including their use of collective coping (e.g., talking to friends, see Liao et al., 2020). Thus, extending this research to examine how other types of individual resilience messaging may be undermining of the collective action of women from more marginalised communities is an important avenue for future research.

Research is also needed to examine alternative explanations for individual resilience messages being undermining of women's collective-action intentions. In Study 1 (undergraduate women), we found this occurred through lower anticipated gender discrimination and lower anger over gender inequality, but in Study 3 (professional working women), these same constructs were not mediators. Another identified pathway to collective action besides perceptions of injustice/anger is collective efficacy: beliefs that collective action will be effective (van Zomeren et al., 2008). It is possible that for women already in the professional workforce, perceptions of gender discrimination and anger may be more stable based on actual (rather than projected) experiences. Thus, for women already in the professional workplace, collective-action intentions after exposure to the individual resilience message may be reduced via reduced beliefs that their collective action would be effective. This could occur because individual resilience messages signal to women that others expect women to solve gender inequality by working on themselves, rather than acting collectively.

These findings also underscore the need to further develop theorising about feminist identification to incorporate the effects of neoliberal feminism. This includes broadening understandings of individual mobility strategies (i.e., women taking individual actions to help their own career advancement) as necessarily inconsistent with identification as a feminist (e.g., see Derks et al., 2015; Ellemers, 2001). Consistent with theorising that neoliberal feminism has re-defined women's empowerment as being achieved through working on the self (Rottenberg, 2014) results from our pilot test for Study 3 confirmed individual resilience messages were rated as feminist, positive, and inspiring. Moreover, women's identification with feminism was high across studies and did not vary significantly across conditions, even

when collective-action intentions were significantly lower in the resilience conditions (see Supplementary Materials for full analyses). More research is needed to examine evidence for and implications of this neoliberal feminist shift, whereby feminism is understood as an individual self-project, not one that necessarily involves women and others coming together to challenge external systems of oppression (for related theory and research, see Becker et al., 2015; Siegel & Calogero, 2021).

It would also be beneficial for future research to examine men's support for the neoliberal feminist focus on building women's individual resilience to advance gender equality. Due to increasing recognition that the gender system cannot change without men's acceptance of and participation in change efforts (Connell, 2005), men's efforts to advance gender equality are receiving more attention (e.g., see Drury & Kaiser, 2014; Kutlaca et al., 2020). Yet for many men, appearing to support change may be more attractive than actually supporting change (for related theorising, see Radke et al., 2020). The neoliberal feminist focus may thus be popular with men because it provides a way to be pro-feminism without men changing their behaviour or the systems they benefit from. Thus, examining men's attitudes towards neoliberal feminism (including over other forms of feminism) is another important avenue for future research to help understand its popularity.

Concluding Comment

Advancing the gender equality requires sustained collective efforts. A current popular neoliberal feminist message focuses on building women's resilience to setbacks as *individuals* as an alternative pathway to gender equality. While these messages look positive on the surface, consistent with critical feminist scholars, we have shown that they are likely to come at a 'collective cost'. We found that they may undermine women's collective action without any discernible compensatory 'individual benefits'. Our findings suggest greater critique and caution of this popular form of neoliberal feminism is warranted, especially considering the erosion of structural supports wrought by neoliberal policies has made collective action in support of pro-gender equality structural change ever more urgent.

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Table 1.

Study 1 Descriptive Statistics and Correlations for Collective-Action Intentions, Anger at Inequality, Anticipated Gender Discrimination, Personal Control and Career Ambition.

	Control	Resilient women	Resilient woman + resilience advice	1.	2.	3.	4.	5.
	N = 76	N = 75	N = 68					
1. Collective-action intentions	4.18 (1.19)	4.05 (1.16)	3.68 (1.27)	–				
2. Anger at gender inequality	5.47 (1.26)	5.22 (1.29)	4.98 (1.33)	.68**	–			
3. Anticipated gender discrimination	3.31 (.80)	3.02 (.80)	2.91 (.71)	.56**	.61**	–		
4. Personal control	4.73 (.89)	4.78 (.77)	4.85 (.93)	-.06	-.11	-.14*	–	
5. Career ambition	5.12 (.98)	5.03 (1.02)	5.18 (.92)	.00	.04	-.08	.36**	–

* $p < .05$; ** $p < .01$.

Table 2.

Study 2 Descriptive Statistics and Correlations for Collective-Action Intentions, Anger at Inequality, Anticipated Gender Discrimination, Personal Control and Career Ambition.

Study 2	Mean (SD)				1.	2.	3.	4.	5.	6.
	Control	Resilient women	Resilience advice	Resilient woman + advice						
	N = 79	N = 78	N = 76	N = 76						
1. Collective-action intentions	3.77 (1.26)	4.05(1.37)	4.12(1.30)	3.97 (1.20)	–					
2. Anger at inequality	4.73 (1.42)	4.91(1.45)	4.90(1.25)	4.84 (1.37)	.64**	–				
3. Anticipated discrimination	2.62 (.90)	2.71 (.89)	2.59 (.87)	2.78 (.84)	.47**	.45**	–			
4. Personal control	4.76 (.83)	4.58 (.93)	4.64 (.81)	4.42 (.96)	.05	.02	-.20**	–		
5. Career ambition	5.10 (1.01)	5.04 (1.12)	4.76(1.00)	4.69 (1.12)	.21**	.20**	.13*	.36**	–	
Study 3										
	Control	Resilient women	Resilience advice	Resilient woman + advice						
	N = 107	N = 107	N = 102	N = 105						
1. Collective-action intentions	4.18 (1.36)	3.86 (1.47)	3.80 (1.42)	3.80 (1.42)	–					
2. Anger at inequality	5.05 (1.49)	4.95(1.57)	5.05 (1.56)	4.92 (1.55)	.67**	–				
3. Perceived discrimination	2.55 (.99)	2.39 (1.04)	2.45 (1.01)	2.43 (1.01)	.44**	.37**	–			

4. Personal control	4.48 (.91)	4.56 (.78)	4.55 (.84)	4.60 (.90)	-.09	-.12*	-.19**	–		
5. Career ambition	4.51 (1.08)	4.66 (1.01)	4.57 (1.22)	4.51 (1.19)	.26**	.20**	.16**	.35**	–	
6. Self-help intentions	4.92 (1.35)	5.06 (1.15)	4.99 (1.38)	4.83 (1.40)	.43**	.34**	.20**	.11*	.41**	–

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

Figure 1. Mediation model Study 1 showing the effect of resilience messages (compared to control) on collective-action intentions mediated by anticipated gender discrimination and anger at inequality. Solid lines represent significant paths, dashed lines represent non-significant paths.

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

Figure 2. Mediation model Study 2 showing the effect of the resilience messages (compared to control) on collective-action intentions mediated by anticipated gender discrimination and anger at inequality. Solid lines represent significant paths, dashed lines represent non-significant paths.

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

Figure 3. Mediation model Study 3 showing the effect of the resilience messages (compared to control) on collective-action intentions mediated by perceived gender discrimination and anger at inequality. Solid lines represent significant paths, dashed lines represent non-significant paths.

Exploring collective costs and individual benefits of neoliberal feminism

Supplementary Information

Preregistration information for Study 2 and 3 is available at https://osf.io/5hsbn/?view_only=cbb7fe36e0494dc5a805c83fcd086c41 where study materials are also available.

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1. Materials and Measures

Gender inequality information. In Part A, participants received information about gender inequality in society. We told them that the first part of the research related to how accurately people recall information about gender, and that they would read some broad statistics about gender in society. We asked them to please read the information carefully as they would be asked some questions to examine their recollection. The information below is from Study 1, and was slight adjustments were made to ensure accuracy for subsequent studies:

“The UK outlawed discrimination based on a person’s sex or marital status over 40 years ago. Since then, women have made important advances in the public sphere, yet considerable gender inequalities have persisted.

In virtually every profession, men continue to outnumber women at the top. The following figures provide a snapshot of the persistence of continuing gender in the UK:

Law: 68% of law students are women, as opposed to 47% of all lawyers, 33% of firm partners and 30% of judges. Only 1 of 12 Justices on the Supreme Court is a woman.

Business: 50% of business students are women, yet only 19% of senior managers and 7% of CEOs in FTSE 100 companies are women.

Politics: Women remain underrepresented in politics at the local and national level. Women are 33% of councillors and 17% of council leaders, while only 32% of MPs and 26% of cabinet ministers are women.

Medicine: 55% of medical students and 52% of GPs are women, yet only 34% of those on the Specialist Register and 11% of consultant surgeons are women.”

Adjustments made to this information for Study 2 and 3 were as follows: In Study 2, we changed the percentage of women cabinet ministers to 23%; and in for Study 3, we changed the number of Justices of the Supreme Court (2); the percentage of CEOs of FTSE 100 companies (5%); councillors (35%); council leaders (20%); MPs (34%); and cabinet ministers (24%).

Following the statistics, participants were asked their recollection of the information presented. In Study 1, we used four questions and in Study 2 and Study 3, we used three questions, removing a question used in Study 1 about the percentage of council leaders who are women. The questions were as follows: “What percentage of council leaders are women? ‘28%’, ‘40%’, ‘17%’”; “Of the 12 Justices on the Supreme Court, how many are women? ‘5’, ‘3’, ‘1’”; “What percentage of CEOs in the FTSE 100 companies are women? ‘15%’, ‘7%’, ‘35%’”; “What percentage of consultant surgeons are women? ‘11%’, ‘22%’, ‘40%’”. Multiple-choice options were updated for each study to be accurate at the time, and always had women’s numbers below 50 percent, to reinforce the gender-inequality message.

Resilience manipulations. Following the gender inequality statistics (and related questions) participants in the resilience conditions were randomly assigned to one of two (Study 1) or three (study 2 and 3) resilience manipulations.

Study 1

Information about resilience was preceded by the following instructions:

“The following page contains individual-level information about gender. Specifically, information about the career of a man or a woman. Please take time to read the

information carefully. You will then be asked to respond to a number of questions to examine your recollection of the information presented.” Participants were then informed that they had been “randomly selected to read information about the career of business women [name redacted].

The information in the resilient condition “Successful Resilient Woman” (i.e., the “part” resilience advice condition) was as follows:

“A former lawyer, [name redacted] was a major player in the fledgling mergers and acquisitions insurance industry in the UK in the mid-1990s. In 2001, she accepted a post in Australia to create and head up a new mergers and acquisitions team for Aon. Within 3 years, her department was the largest producer of new revenue for Aon, having cracked the hard-nosed investment banking and private equity worlds in Australia. Within Aon internationally, [name redacted] was recognised as a standout performer. She won a Business Woman of the Year Award in 2004 and was named Business Review Weekly’s ‘Rising Star’ in 2005 – all this whilst being a single mother of twin girls, one of whom has a disability.”

For the “combined” resilient condition: “Successful Resilient Women plus Resilient Advice”, we included the following additional information:

“[Name redacted] moved back to the UK in 2006 and founded [Name redacted], a leading women's empowerment consulting company that spans a large number of global clients. She is also the creator of the My Mentor suite of women's advancement programs, which provide women with insights about how to achieve career success through adopting the right attitudes and approaches to their careers. [Name redacted's] passion for helping women achieve their personal and career goals is reflected in her book, 'Grit', which provides women with the tools to identify and overcome the self-doubts that might be holding them back – inspiring them to believe they can achieve whatever they put their minds to. This book, first released in 2008 and now in its second edition, was a UK bestseller.”

Following the resilience manipulations, participants were asked about their recollection of the information presented. Three multiple-choice questions were common across conditions, including: “The mergers and acquisitions team [name redacted] set up in Australia became the largest producer of new revenue for Aon after how many years? ‘3 years’, ‘10 years’, ‘7 years’” Was [name redacted] named a ‘Rising Star’ by Business Review Weekly? ‘Yes’, ‘No’; “[Name redacted] was described as ‘married with two children, one of whom has a disability’, ‘married with one child’, ‘a single mother of twins, one of whom has a disability’, single with no children’, ‘none of the above’. In the condition with additional resilience advice, a fourth question specific to that condition was also included, “[name redacted's] book ‘Grit’ was first released in 2008. True or false? ‘True’, ‘False’”.

Studies 2 and 3

We made the following changes and additions to the resilience manipulations in Study 2 and 3. First, we ensured the “combined” condition (Successful Resilient Woman + Resilience Advice) only conveyed additional resilience advice information and not additional information about the career success of the resilient woman. Second, we added another “part” resilience condition that only included resilience advice.

Accounting for the above changes, we adapted the instructions prior to the resilience manipulations to be as follows:

“The following page contains information about gender in society that relates to particular groups or people. Please take time to read this information carefully. You will then be asked some questions to examine your memory of the information presented.

Participants were then informed that they had been randomly selected to read information about a businesswomen, a women’s empowerment consultancy company, or about a business woman and a women’s empowerment consultancy company.

The information in the “Successful Resilient Woman” condition was identical to Study 1 (see above description), except for new information about her most recent professional position. We had not included this information in Study 1 because it was only presented in the “combined” condition, where it was interwoven with the resilience advice information. In separating out information about the woman’s career from resilience advice, we were able to include the following information across conditions for equivalence:

“[Name redacted] was head-hunted to return to the UK to head up the risk strategy for a major UK insurance company, and is one of the few women board members in the industry”

In the new “part” resilient condition, resilience advice information was conveyed through describing a women’s empowerment consultancy company as follows:

“[Name redacted] is a women's empowerment consulting company that works with a range of UK clients. [Name redacted] created the 'My Mentor' suite of women's advancement programs, which provide women with insights about how to achieve career success through adopting the right attitudes and approaches to their careers.

Recently, the staff at [Name redacted] endorsed 'Grit': a guidebook for helping individual women find effective strategies for achieving their personal and career goals. In particular, they highlighted the guidebook’s value in providing women with the tools to identify and overcome the self-doubts that might be holding them back—inspiring them to believe they can achieve whatever they put their minds to.”

In the “combined” resilient condition: ‘Successful Resilient Women + Resilience Advice’, participants received the same information provided to participants in the ‘Successful Resilient Woman’ condition, along with information in the ‘Resilience Advice’ condition adapted to indicate the woman’s involvement as an advisor to the company. The information was as follows:

“[Name redacted] is also associated with [name redacted], a women's empowerment consulting company that works with a range of UK clients. In consultation with [name redacted], [name redacted] created the 'My Mentor' suite of women’s advancement programs, which provide women with insights about how to achieve career success through adopting the right attitudes and approaches to their careers.

Recently, [Name redacted], and the staff at [name redacted], endorsed ‘Grit’: a guidebook for helping individual women find effective strategies for achieving their personal and career goals. In particular, they highlighted the guidebook’s value in providing women with the tools to identify and overcome the self-doubts that might be holding them back – inspiring them to believe they can achieve whatever they put their minds to.”

Following the resilience manipulations, participants were asked about their recollection of the information presented:

For the “Successful Resilient Women” condition, we adapted 2 of the 3 questions from the comparable condition in Study 1: “Was [name redacted] named a ‘Rising Star’ by Business Review Weekly? ‘Definitely yes’, ‘Probably yes’, ‘Probably not’, ‘Definitely not’”; “[Name redacted] was described as ‘married with one child, ‘a single mother of twins, one of whom has a disability’, single with no children”.

For the “Resilience Advice” condition, we adapted one question from Study 1 to make it specific to the women’s empowerment company: “[Name redacted] endorsed a guidebook to help women identify and overcome self-doubts that might be holding them back. What was the guidebook called? ‘Anticipation’, ‘Grit’, ‘Foresight’. We also included a new question about that company’s activities: “Was an aim of [name redacted’s] ‘My Mentor’ advancement programs to provide women with insights about how to achieve career success? ‘Definitely yes’, ‘Probably yes’, ‘Probably not’, ‘Definitely not’.

Participants in the “combined” resilience condition (“Successful Resilient Women + Resilience Advice”) received both sets of questions.

After completing Part A, we introduced Part B, where we instructed participants that we were interested to know more about how people think about their own futures (i.e., the goals and expectations they have for their own lives) as well as their views about how society functions more broadly.

Measures

Collective action intentions. Participants indicated their intentions to participate in collective action to support the gender-equality cause using twelve items developed by Kelly and Breinlinger (1995). We asked participants: “How likely is it that you will engage in the following actions to progress the cause for gender equality”. Items related to different types of actions, including participation in women’s groups: “Act as a spokesperson for a particular women’s issue”, “Spend time working for a women’s campaign, e.g., fundraising”, “Attend meetings or workshops about women’s rights”, “Raise women’s issues in groups or organizations”; collective protest: “Break the law, e.g., block the road with a street demonstrations”, “Take part in a rally or demonstration”, “Attend demonstrations, protests or rallies about women’s issues”; informal participation: “Discuss women’s issues with friends or colleagues”, “Read articles, journals or watch films about women’s issues”; and individual protest: “Contact your MP”, “Contact the media, e.g., radio, TV, newspapers”, “Sign a petition”). Responses ranged from 1 (*Not at all likely*) to 7 (*Very likely*). (Study 1 $\alpha = .92$; Study 2 $\alpha = .93$; Study 3 $\alpha = .96$), with higher scores indicating greater intentions to engage in collective action.

Gender discrimination. We used five items drawn from Begeny and Huo (2018) to measure participants’ expectations that they would face gender discrimination in the future [Study 1 and 2] or had experiences of gender discrimination in their working lives [Study 3]: “Thinking about your future, do you think you will be [Study 1 & 2]; “Thinking about your working life, how often have you felt that you were.” [Study 3]: ‘discriminated against because of your gender?’, ‘viewed negatively because of your gender?’, ‘deprived of certain opportunities (available to others) because of your gender?’, ‘treated according to stereotypes, based on your gender?’, ‘seen as inferior to others because of your gender?’”; (Study 1 $\alpha = .87$, Study 2 $\alpha = .89$; Study 3 $\alpha = .94$). Responses ranged from 1 (*Never*) to 5 (*Very often*). With higher scores representing greater expectations of facing gender discrimination in the future (Study 1 and 2, students samples), or greater perceptions of having experienced gender discrimination in their working lives (Study 3, working sample).

Anger about inequality. Participants indicated their anger at gender inequality using four items from van Zomeren et al. (2004): “angry” “irritated”, “furious”, “displeased” (Study 1, $\alpha =$

.91; Study 2 $\alpha = .89$; Study 3 $\alpha = .94$). We asked participants: “When you consider that there continuing gender-based inequalities, to what extent do you feel...” Responses ranged from 1 (*Not at all*) to 7 = (*Very much*), with higher scores representing greater anger.

Personal control. Participants rated their feelings of personal control over their life outcomes using six items drawn from Lachman and Weaver (1998). Three items related to mastery: “I can do just about anything I set my mind to”, “When I really want to do something, I usually find a way to succeed at it”, “Whether or not I am able to get what I want is in my own hands”. And three items related to constraints: “I have little control over the things that happen to me”, “I often feel helpless in dealing with the problems of life”, “There are many things that interfere with what I want to do”. Responses ranged from 1 (*Strongly disagree*) to 7 (*Strongly agree*). The three constraints items were reverse scored and the six items formed a reliable scale across studies (Study 1 $\alpha = .75$; Study 2 $\alpha = .76$; Study 3 $\alpha = .71$), with higher scores indicating greater personal control over one’s life outcomes.

Career ambition. Participants rated how ambitious they were, using five items from Duckworth et al. (2007): “I aim to be the best in the world at what I do”, “I am ambitious”, “Achieving something of lasting importance is the highest goal in life”, “I am driven to succeed”, “I think achievement is overrated” (reverse scored)). Responses ranged from 1 (*Strongly disagree*) to 7 (*Strongly agree*). These items formed a reliable scale (Study 1 $\alpha = .78$; Study 2 $\alpha = .81$; Study 3, $\alpha = .80$) with higher scores indicating greater career ambition.

Study 3 only

In Study 3, we included additional measures of intentions to engage with self-help strategies. Items were pilot tested (see section 6)

Self-help intentions. Participants rated their intentions to engage in a number of actions designed to help their career advancement, using items developed for the current study (also see analyses relating to the pilot test of these measures in section 3. Participants answered: To assist you in your career goals, how likely would you be to engage in the following actions? “Attend a training course on building self-confidence in the workplace”, “Attend a workshop on how to negotiate effectively in the workplace”, “Seek out information (e.g., books, blogs) on how to have a better work-life balance” “Seek guidance (e.g., from senior colleagues, a mentor) about how to maintain career motivation despite setbacks”, “Use career coaching or similar resources (e.g., online apps) to manage workplace stressors”, “Attend training to build leadership skills”, “Attend networking events”. Responses ranged from 1 (Very unlikely) to 7 (very likely). These items formed a reliable scale, with higher scores indicating greater intentions to engage in self-help strategies ($\alpha = .93$).

Additional Measures

In all studies, we included the following additional measures.

Belief in a meritocracy. We included a measure of Belief in a Meritocracy, adapted from Garcia (2001) relating to beliefs that hard work is the main component of success. There were 7 items, including: “Many people’s efforts go unnoticed and unrewarded” (reverse scored), “Hard work does not always pay off” (reverse scored), “Success is possible for anyone who is willing to work hard enough”, “In almost all professions or job positions, those who work the hardest will rise to the top”, “All people who work hard can improve their position in life”, “Uncontrollable factors often limit one’s success, despite a person’s best efforts” (reverse scored), “Effort is the largest component of success” Response options ranged from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*) with higher scores indicating greater belief in a meritocracy (Study 1 $\alpha = .92$; Study 2 $\alpha = .76$; Study 3, $\alpha = .82$).

Modern sexism. We included items from the Modern Sexism scale (Swim et al., 1995), relating to denial of ongoing gender inequality in society. The 7 items (2 reverse scored) included: “Discrimination against women is no longer a problem in the United Kingdom” “Women often miss out on good jobs due to sexual discrimination”, “It is rare to see women treated in a sexist manner on television”, “On average, people in our society treat husbands and wives equally”, “Society has reached the point where women and men have equal opportunities for achievement”, “It is easy to understand why women's groups are still concerned about societal limitations of women's opportunities”, “Over the past few years, the government and news media have been showing more concern about the treatment of women than is warranted by women's actual experiences” Response options ranged from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*), with higher scores indicating greater modern sexism beliefs (Study 1 $\alpha = .92$; Study 2 $\alpha = .79$; Study 3 $\alpha = .82$).

Demographics

Gender. In Study 1 participants selected one option from three: Male, Female, Other (please specify). In Study 2 from five options: Male, Female, Trans (please specify further if you wish) Genderqueer/Non-binary, Not listed (please specify if you wish) and in Study 3 from four options: Do you identify as a ‘Woman’, ‘Man’, ‘Genderqueer/Non-binary’, Not listed (please specify if you wish).

Age. Participants wrote their age (numerals, whole numbers).

British citizen. Participants indicated whether they were a British citizen: (Yes, No (please specify your citizenship)).

Ethnic background. Participants selected their ethnic background from six options: White; Black/African/Caribbean/Black British; Arab; Asian/Asian British; Mixed/multiple ethnic groups (please specify); Other (please specify).

Education. In Study 1 and 2 Participants indicated whether they were currently enrolled as a student at a university in the UK (Yes, NO), and for those recruited via Prolific in Study 2, we included additional questions about the current level of education in which they were enrolled (Undergraduate degree (BA/BSc/other), Graduate degree (MA/MSc/MPhil/other), Doctorate degree (PhD/MD/other), Other (please specify)). In Study 3, we asked participants whether they were currently enrolled as a student at a university of higher education college (Yes - full-time, Yes part-time, No), and to indicate their highest level of education completed (No formal qualifications, High school diploma/ A-levels, Technical/community college, (Undergraduate degree (BA/BSc/other), Graduate degree (MA/MSc/MPhil/other), Doctorate degree (PhD/MD/other),

Employment. In Study 1 and 2, participants indicated whether they were currently employed (Yes, Full-time; Yes, Part-time; Yes, Casual; No).

In Study 3, we asked participants to select their current employment status (including self-employed and employed by others), and if more than one, to please choose the option that best described their main employment (Full-time paid employment; Part-time paid employment; Casual paid employment; Unemployed (and job seeking); Not in paid employment (e.g., homemaker, retired, or due to a disability); Other (please specify)). Participants also selected their managerial status (Upper management; Middle management; Junior management; Non-managerial; Not applicable); how many years they had been in paid employment since graduating from university, excluding the total number of years not in paid employment since graduating due to further study, caring responsibilities,

or for health or other reasons (numerals, whole numbers); and the percentage of women employees in their industry (sliding scale, 0-100%); and thinking about the career goals they had when they started, how far they had come towards achieving them (sliding scale, 0-100%).

Feminist identification and activism. We also included 3 items relating to feminist identification based on Leach et al. (2008) solidarity measures of group identity: “I feel a bond with feminists”, “I feel solidarity with feminists”, “I feel committed to feminism”. Response options ranged from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*) with higher scores indicating greater feminist solidarity (Study 1 $\alpha = .95$, Study 2 $\alpha = .93$; Study 3, $\alpha = .82$). In addition, we included two questions about their past actions in support of feminism: “Are you an active member of any groups or organizations that promote women’s rights?” ‘Yes’, ‘No’; “Have you taken any actions in the past (e.g., signed an online petition, attended a rally) in support of women’s rights?” ‘Yes’, ‘No’.

Study 2 and 3 only

As some (Study 2) or all (Study 3) participants were recruited through Prolific additional measures were incorporated for inclusion criteria and descriptive purposes.

UK residency. Participants indicated whether they were currently living in the UK (Yes, No). In Study 3, we included an additional question on the number of years they had lived in the UK (numerals, whole numbers).

Study 3 only

In Study 3, we included additional measures to adequately describe the sample of professional women.

Parental status and primary care-giving. Participants indicated whether they were a parent (Yes, No), and whether they were a primary caregiver, including of children if they had them and/or of elderly relatives or others that are primarily dependent on them for their day-to-day care (Yes, No). Participants who were primary-caregivers also rated the demands of their primary care giving role on a typical day, with responses ranging from 1 (*very low demand*) to 5 (*very high demand*).

Relationship status. Participants indicated which of the following options best described their current relationship status: Single, De facto/in a domestic partnership, Married/Civil Partnership, Widowed, Divorced, Separated, Other (please specify if you wish).

Pandemic wellbeing effects: Participants indicated which option best described how the COVID-19 pandemic, or policies to restrict spread of the virus, was affecting their wellbeing: Very negatively, Moderately negatively, Slightly negatively, No meaningful difference, Slightly positively, Moderately positively, Very positively.

2. Exclusions

Study 1 exclusions

In Study 1, our target sample was British women currently enrolled in higher education. To meet this target, we applied demographic exclusion criteria based on participant’s responses in the survey. We excluded eighty-three cases based on the demographic criteria below.

Incomplete cases. One-hundred and forty-three (32%) of the 445 people who started this research did not complete it and were excluded.

Demographics:

Gender. We excluded 39 participants who did not identify as women.

British citizens. We excluded a further 32 participants who were not British.

Student status. We excluded a further 12 participants who were not students.

Suspicion check: No participants correctly guessed the aim of the study so no exclusions were made.

Study 2 exclusions

In study 2, our pre-registered exclusion criteria included those: (1) who do not complete the survey/all questions; (2) whose demographic data indicates they are not women, British citizens, or students; (3) who fail at least 2 of the 3 comprehension questions about gender inequality; (3) who fail 50% or more of the comprehension questions relevant to the manipulations in conditions 2, 3, or 4; (4) who fail the suspicion check question.

1. Incomplete cases. Fifty-four people (10%) of the 555 people who started this survey did not complete it and were excluded leaving a total combined number of 501 complete cases (SONA = 263; Prolific = 238).

2. Demographics.

Gender. We excluded 37 people who were not women, including 33 participants who indicated they were male (32 course credit, 1 Prolific), 3 participants who indicated they female and male (1 course credit, 2 Prolific), and 1 participant (course credit) who indicated their gender was not listed. Three participants (2 course credit; 1 Prolific) who indicated they were female and Genderqueer/Non-binary and 1 participants (course credit) who wrote in the free response option that they were a “nonbinary woman” were included.

British citizens. We excluded a further 60 participants (57 course credit, 3 Prolific) who were not British.

Student status. We excluded a further 11 participants (all from Prolific) who were not students.

3. Comprehension checks.

Gender inequality statistics. Sixty-three people (16%) who failed at least 2 of the 3 comprehension questions about gender inequality were excluded. Across conditions there were no significant difference in the proportion of participants (between 14%-25%) who were excluded on this basis: $\chi^2(3) = 3.39, p = .336$.

Resilience information. Twenty people in total were excluded. Sixteen participants from the “single” resilience conditions who got 50% or more of the 2 questions about the resilience information incorrect. There was no significant difference in the proportion of participants (12% vs 6% in SRW or RA conditions respectively) who failed at least 1 of the 2 questions: $\chi^2(1) = 1.90, p = .168$. An additional 4

participants (5%) from the “double” resilience condition were excluded for getting 50% or more of the 4 questions about that condition wrong.

4. **Suspicion check:** We assessed participants' open-ended responses to the suspicion check question, and excluded one participant (course credit) who guessed the research aims [*“to see if the article we read influenced how engaged and motivated we felt by women's issues. Perhaps for some people [name redacted] was less inspirational which made us respond that we were less likely to take action and more likely to be discriminated against?”*].

Study 3 exclusions

In study 3, our pre-registered exclusion criteria included those: (1) who do not complete the survey/all questions; (2) whose demographic data indicates that they do not meet the inclusion criteria (i.e., they are not university graduate women between the ages of 22-50, residing in the UK and in paid employment, but where participants are not in paid employment but meet all other inclusion criteria, they will be included providing they indicate that they have worked for at least 1 year since graduating). (3) who they fail at least 2 of the 3 comprehension questions about gender inequality and those who fail 50% or more of the comprehension questions relevant to the resilience manipulations in conditions 2, 3 or 4; (4) who fail the suspicion check question.

1. **Incomplete cases.** Twenty-six (5%) of the 545 people who started this survey did not complete it and were excluded leaving 519 complete cases.

2. Demographics.

Gender. We excluded 1 participant who identified as a man. Eight participants who selected Genderqueer/Non-binary, and 3 participants whose free-text responses indicated they were women (e.g., “I don’t “identify” as anything, I am a woman”) were included.

University graduates. We excluded a further 9 participants who indicated they were not university graduates.

Age. No participants were outside the age range of 22-50, so no exclusions were made.

UK residing. No participants were living outside the UK, so no exclusions were made.

Paid employment. Two participants indicated they were not currently in paid employment (due to “Maternity” or because they were a “furloughed part time worker”), but consistent with our pre-registration criteria, because both had worked for more than 1 year since graduating, they were no exclusions were made.

3. Comprehension checks.

Gender inequality statistics. A further seventy-four people (15%) who failed at least 2 of the 3 comprehension questions about gender inequality were excluded. Across conditions, there were no significant difference in the proportion of participants (between 11%-22%) who were excluded on this basis: $\chi^2(3) = 3.19, p = .345$.

Resilience information. A further 8 people were excluded. Seven participants from the “part” resilience conditions who got 50% or more of the 2 questions about the

resilience information incorrect. One participant from the “combined” resilience condition was excluded for getting 50% or more of the 4 questions about that condition wrong.

4. **Suspicion check:** We assessed participants’ open-ended responses to the suspicion check question, and excluded a further six participant who guessed the research aims by indicating that it was examining how information about successful women and/or role models, and/or positive stories about women affect views about gender [e.g., “*To see if the positive story about the business woman had an effect on how you assess the status of women in society.*”, “*Impact of article highlighting female role models on perceptions of discrimination?*”].

3. Demographics

Study 1				
Gender %	Age	Ethnicity %	Employment Status %	Past feminist activism %
Women = 100	<i>M</i> = 20.05 <i>SD</i> = 1.57 Range = 18-30	Asian/Asian British – 3.7 African/Caribbean/Black British – 2.3 White – 92.2 Mixed/multiple ethnic groups – 1.8	Full-time paid employment – 4.1 Part-time paid employment – 20.1 Casual paid employment – 20.6 Not in paid employment – 54.8	Member women's groups Yes – 6.8 No – 93.2 Past action to support women's rights Yes – 46.1 No – 53.9
Study 2				
Gender	Age	Ethnicity %	Employment Status %	Past feminist activism %
Women = 309 + Non-binary/ Genderqueer = 2	<i>M</i> = 21.46 <i>SD</i> = 6.13 Range = 18-66	Asian/Asian British – 5.2 African/Caribbean/Black British – 1.9 White – 90 Mixed/multiple ethnic groups – 2.6 Other (please specify if you wish) –.3	Full-time paid employment – 6.5 Part-time paid employment – 25.6 Casual paid employment – 12.9 Not in paid employment – 55	Member women's groups Yes – 7.4 No – 92.6 Past action to support women's rights Yes – 52.8 No – 47.2
Total N = 309				

Table S1. Demographics for Studies 1 and 2

Table S2. Demographics for Study 3

Gender %	Age	Years in UK	Ethnicity %		Education %	Employment Status %	
Women = 98 Non-binary = 2	<i>M</i> = 32.75 <i>SD</i> = 7.61 Range = 22-50	<i>M</i> = 27.98 <i>SD</i> = 11.81 Range = 2-50	Asian/Asian British – 5.2 African/Caribbean/Black British – 2.6 White – 86.7 Mixed/multiple ethnic groups – 4.3 Other (please specify if you wish) – 1.2		Undergraduate – 62.7 Graduate degree – 32.1 Doctorate degree – 5.2	Full-time paid employment – 73.2 Part-time paid employment – 21.6 Casual paid employment – 1.4 Unemployed (job seeking) – 1.9 Not in paid employment – 1.2 Other (please specify) – .7	
Years employed since graduating	Managerial Status %	Progress career goals %	Women employees %	Relationship status %	Parental status/primary caregiver %	Feminist activism %	Effects of Covid-19 (or related policies) on wellbeing
<i>M</i> = 9.74 <i>SD</i> = 7.21	Upper - 3.3 Middle - 15.7 Junior - 19.5 Non-manager - 55.1	<i>M</i> = 50.94 <i>SD</i> = 23.75 Range 0-100	<i>M</i> = 56.94 <i>SD</i> = 19.88 Range 5-98	Single – 32.1 De facto/in a domestic partnership – 32.3 Married/Civil Partnership – 32.5 Divorced – 1.2 Separated – 1 Other – .2	Parent Yes – 33.3 No – 66 Primary caregiver Yes – 29.2 No – 69.8	Member women's groups Yes – 12.4 No – 86.9 Past action to support women's rights Yes – 65.8 No – 33.5	Very negatively – 7.4 Moderately negatively – 29.7 Slightly negatively - 43 No meaningful difference – 12.1 Slightly positively – 3.8 Moderately positively - 2.6 Very positively - .7

4. Feminist identification

To examine participant's general orientation to feminism, we examined their answers to questions about feminist identification. Participants in all studies identified moderately highly as feminists, with mean responses around (or just under) 5 on a 7-point scale. Means (*SDs*) across studies are presented in Table X.

Study 1

The comparison for participants in the control compared to resilient conditions was not significant: $t(216) = -.90$, $p = .369$, 95% CI $[-.81, .30]$. Cohen's $d = .26$. Nor was the comparison between participants in the resilience conditions significant ($p = .83$).

Study 2

The comparisons for participants in the control compared to the resilience conditions was not significant: $t(305) = 1.76$, $p = .08$, 95% CI $[-.21, 1.07]$, Cohen's $d = .43$. Nor were there significant differences when comparing participants in the Successful Resilient Woman with participants in the two Resilience Advice conditions combined, or between the two Resilience Advice conditions ($ps > .45$).

Study 3

The comparisons for participants in the control compared to the resilience conditions was not significant: $t(417) = -1.81$, $p = .071$, 95% CI $[-1.27, .05]$, Cohen's $d = .61$. Nor were there significant differences when comparing participants in the Successful Resilient Woman with participants in the two Resilience Advice conditions combined, or between the two Resilience Advice conditions ($ps > .51$).

Table S3. Means (*SDs*) for feminist identification across conditions for Studies 1-3.

Feminist solidarity	Control	Resilient women	Resilience advice	Resilient woman + resilience advice
Study 1	N = 76	N = 75	^	N = 68
	4.93 (1.68)	4.75 (1.71)	^	4.69 (1.60)
Study 2	N = 79	N = 78	N = 76	N = 76
	4.57 (1.47)	4.81 (1.62)	4.95 (1.35)	4.99 (1.54)
Study 3	N = 106	N = 106	N = 102	N = 104
	5.03 (1.59)	4.68 (1.81)	4.77 (1.59)	4.62 (1.69)

^Resilience advice (alone) was not a condition in Study 1.

5. Additional comparisons between resilience conditions

Direct comparisons between three resilience conditions on collective action measure

Study 2

For the three resilience conditions, we did not make predictions but examined the effect of exposure to a successful resilient woman without resilience advice, comparing the Successful Resilient Woman condition with the Resilience Advice conditions combined. There were no significant differences for anger at inequality: $t(305) = -.20$, $p = .841$, 95% CI [-.44, .39], Cohen's $d = .03$; anticipated gender discrimination: $t(305) = -.24$, $p = .814$, 95% CI [-.48, .34], Cohen's $d = .07$; or collective-action intentions: $t(305) = -.01$, $p = .989$, 95% CI [-.41, .42], Cohen's $d = .01$.

We also examined the effect of resilience advice without a successful resilient woman by comparing the Resilience Advice and Successful Resilient Woman + Resilience Advice conditions, finding no significant differences for anger: $t(305) = -.27$, $p = .791$, 95% CI [-.16, .34], Cohen's $d = .09$; anticipated future discrimination: $t(305) = 1.33$, $p = .184$, 95% CI [-.22, .28], Cohen's $d = .03$; or collective-action intentions: $t(305) = -.69$, $p = .491$, 95% CI [-.23, .26], Cohen's $d = .02$.

Study 3

For the three resilience conditions, we did not make predictions but examined the effect of exposure to a successful resilient woman without resilience advice, comparing the Successful Resilient Woman condition with the Resilience Advice conditions combined. There were no significant differences for anger at inequality: $t(417) = .186$, $p = .852$, 95% CI [-.42, .51], Cohen's $d = .04$; anticipated gender discrimination: $t(417) = .401$, $p = .688$, 95% CI [-1.04, .28], Cohen's $d = .38$; or collective-action intentions: $t(417) = -.279$, $p = .780$, 95% CI [-.53, .40], Cohen's $d = .07$.

To examine the potential effect of resilience advice information without exposure to a successful resilient woman, we also ran comparisons between the Resilience Advice and Successful Resilient Woman + Resilience Advice conditions, finding no significant differences for anger: $t(417) = -.527$, $p = .568$, 95% CI [-.35, .19], Cohen's $d = .08$; anticipated future discrimination: $t(417) = -.174$, $p = .863$, 95% CI [-.30, .25], Cohen's $d = .02$; or collective-action intentions: $t(417) = -.176$, $p = .860$, 95% CI [-.30, .25], Cohen's $d = .02$.

Direct comparisons between three resilience conditions on individual benefits measure

Study 2

To examine the effect of exposure to a successful resilient woman without resilience advice, we compared the Successful Resilient Woman condition with the Resilience Advice conditions combined. There was no significant difference for personal control, $t(305) = -.436$, $p = .663$, 95% CI [-.62, .21], Cohen's $d = .21$ but there was for career ambition: those in the Successful Resilient Woman condition had higher career ambition than those in the Resilience Advice conditions combined: $t(305) = -2.12$, $p = .035$, 95% CI [-.87, -.04], Cohen's $d = .46$.

We also ran comparisons between the Resilience Advice and Successful Resilient Woman + Resilience Advice conditions. We did not find that exposure to a successful resilient woman in addition to resilience advice, affected personal control: $t(305) = -1.48$, $p = .139$, 95% CI [-.26,

.24], Cohen's $d = .01$; or career ambition: $t(305) = -.38$, $p = .703$, 95% CI [-.26, .24], Cohen's $d = .01$.

Study 3

To examine the effect of exposure to a successful resilient woman without resilience advice, we compared the Successful Resilient Woman condition with the Resilience Advice conditions combined. There was no significant difference for personal control, $t(417) = .119$, $p = .905$, 95% CI [-.44, .50], Cohen's $d = .03$; career ambition: $t(417) = -.90$, $p = .371$, 95% CI [-.68, .25], Cohen's $d = .21$; or self-help strategies, $t(417) = -.96$, $p = .336$, 95% CI [-.70, .24], Cohen's $d = .30$.

We also ran comparisons between the Resilience Advice and Successful Resilient Woman + Resilience Advice conditions. We did not find that exposure to a successful resilient woman in addition to resilience advice, affected personal control: $t(417) = .453$, $p = .651$, 95% CI [-.21, .34], Cohen's $d = .06$; career ambition: $t(417) = -.35$, $p = .729$, 95% CI [-.32, .224], Cohen's $d = -.05$; or self-help strategies, $t(417) = -.90$, $p = .367$, [-.40, .15], Cohen's $d = -.13$.

6. Study 3 Pilot Study

Background

The aims of the pilot study were to establish in a sample of professional women that the resilience manipulations intended for Study 3 (mirroring those used in Study 2) conveyed the impression that women can be successful if they are resilient. We also wanted to confirm that the separate resilience descriptions were considered inspiring, feminist, and positive. Finally, we used the pilot test to establish that the items we wanted to use to examine "self-help" intentions were valid and reliable.

Sample. Our sample was recruited on Prolific. Inclusion criteria were the same as those intended for Study 3 (i.e. a working (non-student) sample of university educated women currently residing in the UK between the ages of 22-50).

Participant demographics. Our final sample was 59 women, 1 non-binary ($M_{\text{age}} = 32.48$, $SD = 7.26$; age range: 22-50). Consistent with our selection criteria, all participants indicated that they were currently living in the UK and 80 percent were British citizens (Ethnic background: 78.3% White, 11.7% Asian/Asian British; 6.7% Black/Black British, 3.3% mixed/multiple ethnic groups). That vast majority (95%) had undergraduate degrees or higher, with a minority (5%) indicating that High-School or Technical/community college as their highest level of education. For employment, 78.3% were full-time employed, 20% were part-time or casually employed, and 1 person was unemployed and job-seeking. Five percent were currently enrolled in higher education.

Results

Check of resilience manipulations. Three questions were used to examine whether the descriptions of the business woman and company conveyed the message that if women are resilient, they can be successful (e.g., "*The description of [name redacted]/[name redacted] conveys a message that women can be successful if they are resilient*"). Items were rated on a 7-point scale (1 = *strongly disagree* – 7 = *strongly agree*). For both messages, means were close to top of the scale (Business woman: $M = 6.12$, $SD = .81$; Company: $M = 5.96$, $SD = .74$) and differences between conditions were not significant, $t(59) = 1.42$, $p = .160$. Thus, in

both cases, the resilience messages had the intended effect of conveying to participants that resilience is important to women's success.

Check of related judgements about resilience manipulations. In addition to our main check of the resilience manipulations, we examined other related judgements of the message content. Participants responses were provided through 7-point bi-polar scales (see Table 1) and confirmed expectations: both messages was considered inspiring, feminist and positive (close to the top of the scale in all cases), although the Business Woman message was rated significantly more inspiring and positive than the Company message. Both messages were also seen as interesting and informative (close to the top of the scale), although, the Business Woman message was rated significantly more interesting than the Company message.

Table S4. Means (SDs) for judgements of the individual resilience messages

	Resilience Messages	
	Business Woman	Company
Inspiring	6.68 _a (.65)	6.03 _b (.99)
Feminist	5.40 _a (1.39)	5.68 _a (1.35)
Positive	6.60 _a (.85)	6.32 _b (.91)
Interesting	6.38 _a (.94)	6.03 _b (.12)
Informative	5.92 _a (1.20)	5.75 _a (1.19)

Note. Judgements were made on 7-point bi-polar scales (uninspiring-inspiring, anti-feminist-feminist (reverse scored), negative-positive (reverse scored), uninteresting- interesting (reverse scored), uninformative-informative. Means in the same row that do not share a subscript differ at $p < .05$.

Self-help intentions scale. For our 6 items to measure self-help intentions (e.g., “attend a workshop on how to negotiate effectively in the workplace”, see section 1 for all measures used), we used a 7-point scale (1 = *very unlikely* – 7 = *very likely*). These items formed a reliable scale ($\alpha = .75$) and were widely endorsed by this sample of professional women as actions they would take to assist them in their career goals ($M = 5.51$, $SD = .85$). Open-ended responses following this question also confirmed the validity of the self-help items, as they were similar or nearly identical to other actions women mentioned having used to advance their careers (e.g., assertiveness training). In addition to the six items pilot tested, we included an additional item in Study 3 (i.e., “attend networking events”) as networking was mentioned in the open-ended responses by many participants.

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Endnote

ⁱ H1: In our pre-registration for Study 2, we proposed to test the effects of the resilience manipulation by comparing the baseline with the ‘successful resilient woman + resilience advice’ condition. After careful consideration, we decided that the most appropriate test of the resilience hypothesis would be to compare the baseline with the resilience conditions combined. We adjusted Hypothesis 1 accordingly. Results were no different.

ⁱⁱ As with the change to Hypothesis 1, in our pre-registration for Study 2, we initially sought to test the effects of resilience by comparing the ‘successful resilient woman + resilience advice’ conditions with the baseline. However, as a more stringent and appropriate test of the resilience hypothesis was to compare the baseline with the resilience conditions combined, so we also altered H3 accordingly.