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ESRC End of Award Report

For awards ending on or after 1 November 2009

This End of Award Report should be completed and submitted using the **grant reference** as the email subject, to reportsofficer@esrc.ac.uk on or before the due date.

The final instalment of the grant will not be paid until an End of Award Report is completed in full and accepted by ESRC.

Grant holders whose End of Award Report is overdue or incomplete will not be eligible for further ESRC funding until the Report is accepted. We reserve the right to recover a sum of the expenditure incurred on the grant if the End of Award Report is overdue. (Please see the ESRC Research Funding Guide for details.)

Please refer to the Guidance notes when completing this End of Award Report.

Grant Reference	SS-04498 RES-000-22-3800		
Grant Title	The Unanticipated Transformative Potential of Online Forums: Implications for Well-Being and Offline Social Impact		
Grant Start Date	1 July 2010	**Total Amount Expended:**	£89,270.91
Grant End Date	31 August 2012		
Grant holding Institution	University of Exeter		
Grant Holder	Dr Louise F Pendry		
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Co-Investigators (as per project application):		**Institution**	
Dr Jessica Salvatore		Amherst College, U.S.A.	

1. Non-technical summary

Please provide below a project summary written in non-technical language. The summary may be used by us to publicise your work and should explain the aims and findings of the project. *[Max 250 words]*

The internet has become *the* most powerful tool of interpersonal communication in human history. Around 10% percent of UK online users choose to interact through online discussion forums. This high level of voluntary engagement suggests that people are getting something important out of them. The present project sought (a) to better understand what attracts people to use forums and what they get out of them, and (b) to clarify how organisations may harness the potential of forum users to increase offline civic engagement related to the forum issues. It achieved this through a programme of online research which assessed a range of users' experiences with online forums focused upon parenting, environment, health, and hobbies.

Our research considered whether users develop a sense of identification with other forum users and, if so, assessed the psychological benefits of doing so. We predicted and found greater satisfaction with life among users of forums dealing with difficult-to-discuss topics (e.g., mental health), who were strongly identified with other users. Highly identified users of all types of forums (even forums dealing with easier-to-discuss topics) were more willing to get involved in associated offline activities, like petitioning.

Ultimately, our findings document a way to deploy modern technology toward socially useful ends. We now urge end-users and policymakers to recognise the benefits of online discussion forums for users' well-being and civic engagement potential. Findings have been widely disseminated on YouTube; at academic conferences; at a workshop for end-users; and on BBC radio. Several publications are planned.

(248 words)

2. Project overview

a) Objectives
Please state the aims and objectives of your project as outlined in your proposal to us. *[Max 200 words]*

1: Characterize the predictors and time-course of online identity development.
As new users join internet forums, what is the time scale over which they develop the strong collective bonds that we have observed in pilot work, and what factors seem to be most important in creating those bonds? In this project we aim both to *describe* the trajectory -- for the first time -- and also to *explain* it.

2: Investigate implications of forum use for well-being.
Different types of forum membership should have different consequences for

well-being. Recent research suggests that online communication can foster strong virtual bonds and have positive implications for well-being. We expect highly identified users of online forums who benefit from the serendipitous and unanticipated discovery of common bonds with other forum users to experience the greatest benefits for well-being.

3: Investigate implications of forum use for offline impact.
Different types of forum membership should have systematically different consequences for offline behavior. Low identifiers are motivated to work for the self, whereas high identifiers work for the group's benefit. We expect that as forum members become more emotionally identified, they become motivated to express that engagement through offline behavior as well.

(196 words)

b) Project Changes
Please describe any changes made to the original aims and objectives, and confirm that these were agreed with us. Please also detail any changes to the grant holder's institutional affiliation, project staffing or funding. *[Max 200 words]*

There were no major changes to the original aims and objectives. However, it became apparent that sampling issues prevented us from addressing fully the longitudinal aspects of forum use. Specifically, it proved difficult, in spite of considerable efforts on the part of both investigators (see below), to keep the response levels sufficiently high across all three data collection points to permit reliable longitudinal comparisons. The direction of our subsequent analyses has focused instead upon the most theoretically interesting emergent findings across the sample as a whole.

Furthermore, Jessica Salvatore moved to Amherst College (U.S.A.) to take up a faculty position in July 2010. It was agreed that some of the money originally set aside for her buyout would be re-deployed into a travel fund to enable her to make several visits to the UK to coincide with key points in our schedule (analysis of phased data collection, conference attendance).

(149 words)

c) Methodology

Please describe the methodology that you employed in the project. Please also note any ethical issues that arose during the course of the work, the effects of this and any action taken. *[Max 500 words]*

We sought to examine how the process of forum identification unfolds over multiple data collection points in a range of online communities.

Methodology and forum selection: We posted links to a series of online questionnaires on several forums. The selection of forums was guided by both pragmatic issues (we selected forums in which base levels of activity were high and in which we were able to develop good links with forum moderators) and theoretical issues. Our choices covered a range of topics in order to maximize the generalizability of our results and also to enable us to compare and contrast forums in terms of topic type. We were ultimately able to distinguish between stigmatised and non-stigmatised forum topics, which proved an important distinction when trying to understand how forum identity impacts upon satisfaction with life and offline impact (see project findings). A total of 273 participants provided complete data for at least one of the data collection points. We also had 58 participants in a small follow-up study and 415 additional participants in initial cross-sectional studies.

Measures: We assessed users' initial and continuing reasons for using the forum; experiences on the forum (e.g., volume and quality of interaction); collective identification; and outcomes. In some cases, these measures were fully validated and standardized in others' research (e.g., the Satisfaction with Life Scale; Diener, Emmons, Larsen, & Griffin, 1985). In other cases, we developed and extensively pilot tested new measures for which standardized measures are not currently available (e.g., offline civic behavior). A major strength of the present project was that it allowed us to validate and standardize these new measures, which will be of benefit to other researchers.

Data analytic strategy: The data analysis is primarily quantitative. Given the phased nature of the design, data collection was only completed towards the end of the grant period. We have already conducted a series of preliminary analyses that enable us to isolate the key variables that impact forum engagement. We are now learning how to use multi-level modeling to assess the causal precedents and consequences of identity development.

Potential difficulties: Whilst we did pre-empt and overcome a number of potential challenges commonly associated with research of this type, we also encountered and addressed some additional emergent issues. For example, a software error on the University's server caused us to lose data pertaining to the offline behavior measure. However, we had also included behavioral intention measures which served as a proxy. As noted, we encountered high levels of attrition despite employing a vetted exponential reward based system to discourage attrition. We did our best to minimize this by emailing participants several reminders, and by introducing a late bonus payment to encourage ongoing participation. Finally, one site was subject to trolling, and we had to discard a portion of data when it became apparent that it was faked.

Ethics: Our research encountered no unforeseen or insurmountable ethical problems.

(483 words)

d) Project Findings

Please summarise the findings of the project, referring where appropriate to outputs recorded on the ESRC website. Any future research plans should also be identified. *[Max 500 words]*

Key findings to date can be summarised as follows:

In our initial samples, we found strong evidence that forum users can be highly identified with other users. A core goal of our research was to better understand the part identification plays in forum engagement, subjective well-being and offline civic engagement. In particular, we examined when and how users' expectations of forum use match their experiences, and how this impacts upon forum identification and, downstream, how this feeds into subjective well-being and offline impact.

We found the relationships between collective identification and well-being strongest for users of stigmatised forum topics such as post-natal depression. For non-stigmatised forums, this relationship was markedly attenuated. However, users of both types of forums showed strong relationships between identification and offline civic engagement. These preliminary findings suggest that forums can provide a very positive source of support for users with stigmatised conditions such as mental health challenges. Additionally, it is clear that users of all types of forums translate the identification they develop there into offline civic engagement – a novel finding that informs longstanding debates about the online/offline interface.

Subsequent analyses allowed us to understand better what aspects of forum use best predicted identification. Essentially, we found that the factor that best predicts identification is the extent to which people feel the forum has met their expectations about forming new relationships as opposed to simply seeking or sharing information. In line with past research, the social support function best predicts forum identification. This function also best predicts satisfaction with life, and mediational analyses confirmed that the link between expectation about forming new relationships and satisfaction with life is partially mediated by users' levels of identification. In sum, the emerging results pattern highlights the pivotal role of identification in fostering well-being and offline engagement.

Owing to the phased nature of data collection, it has only recently been possible to commence longitudinal data analysis. We have further analyses along these lines planned, in particular using multi-levelling techniques that will enable us to better understand the pattern of relationships between the variables that we have established are important. We are currently receiving training in these techniques and anticipate that analyses will be completed in the spring, after which time we will submit a paper to the *Journal of Applied Social Psychology* which allows us to fully document the theoretical and applied benefits of our programme of research.

However, at this early stage we are very positive about the direction of our results. Thus far little attention has been paid to the role of identification in online communication settings. The present findings paint a very clear picture about the potential utility of discussion forums – so often a neglected online medium – for safeguarding and supporting

their users. We have demonstrated this may have concomitant positive consequences for users and also, we have showcased how such forums can enable organisations to harness and fully realise the potential of their stakeholder-users.

(488 words)

e) Contributions to wider ESRC initiatives (eg Research Programmes or Networks)

If your project was part of a wider ESRC initiative, please describe your contributions to the initiative's objectives and activities and note any effect on your project resulting from participation. *[Max. 200 words]*

The project was not formally associated with an ESRC initiative but was closely related to several of the Council's strategic priorities as well as national priorities. These include a concern with increased *health and well-being* and an increased interest in *new technology, innovation and skills.*

For example, our research emphasises how forum use can benefit individuals living with chronic mental health issues, tying in well with the Council's view that "Maintaining and promoting physical and psychological health and well-being is a pre-condition of a more prosperous and cohesive society." Our research targets sections of the population who may feel unable to readily request or find help to manage their ongoing illnesses and demonstrates how forums can provide an essential conduit for support and enhanced well-being.

As well, our work fits with the Council's desire to appropriately monitor the "explosion of action on the internet" and to engage technology to "open up new platforms for civic participation in contemporary democracy" (ESRC Strategic Plan 2009-2014). We have clearly shown how more identified users are motivated to work on behalf of the online forums they use, and that this can often translate into increased civic participation.

(193 words)

3. Early and anticipated impacts

a) Summary of Impacts to date

Please summarise any impacts of the project to date, referring where appropriate to associated outputs recorded on the Research Outcomes System (ROS). This should include both scientific impacts (relevant to the academic community) and economic and societal impacts (relevant to broader society). The impact can be relevant to any organisation, community or individual. *[Max. 400 words]*

We have engaged closely with end-users in the process of both conducting research (in that it was developed in close consultation with our forum moderators) and feeding back to relevant groups with a view to wider dissemination of our findings.

At a theoretical level, our work is making a significant contribution to the extant literature on the **benefits of group identification in novel settings**. Thus far much of this research has been conducted in offline (and also often laboratory-based) settings. The benefits of our approach are first, that we have been able to assess identity processes in real online settings and second, we consider their impact upon users' sense of subjective well-being and eagerness to engage in associated civic activities. **We are drawing much-needed links between literatures on social psychology, clinical psychology, new technologies, and civic engagement**. Our research has been disseminated at academic conferences in the UK, Europe, and the U.S.A.

A further goal of our research was to ensure our findings reached end-users. We have achieved this in several ways. First, we organised a one day conference as part of the South West Forum's (SWF) programme of events. SWF is the regional voice for voluntary and community-focused organisations. It supports them by informing them of the latest policy developments; connecting them with other groups, public bodies and businesses and influencing government and other key decision-makers about their needs and concerns. As the SWF member organisations rely on mobilizing supporters, lobbying and fundraising, then understanding how to connect and inspire through social networking tools is vital. Our talk was produced in partnership with our moderators. In addition to the conference talk and Q&A session, we provided a surgery session to attendees to offer more bespoke advice to end-users. Participant organisations included Patients Association, Devon Rape Crisis Service, Bristol Rape Crisis, NHS Dorset, Exeter CVS, Headway Devon, Somerset Community Foundation, Educational Action Challenging Homophobia, Somerset Advice Network, East Devon CAB. Feedback on the conference was overwhelmingly positive. Our 30-minute talk has recently been uploaded onto YouTube, and a further 'Talking Heads' video has been professionally produced that captures the main points more concisely to ensure even wider dissemination.

Our work has also been aired on BBC Radio, and in University press releases. Finally, we have provided feedback to all moderators to complete our end-user dissemination mission.

(386 words)

b) Anticipated/Potential Future Impacts

Please outline any anticipated or potential impacts (scientific or economic and societal) that you believe your project might have in future. *[Max. 200 words]*

In addition to the above activities, we are planning further ventures to maximise the impact of our research.

We are keen to contribute to an ongoing debate about the nature of online activity: does it necessarily detract from offline engagement? Our answer, based on our data, will be a clear "no." We will disseminate these important findings more widely in three ways.

First, we will do so scientifically (through peer-reviewed journal articles in the social/political psychology field and human/computer interaction fields).

Second, our work speaks directly to the issue of civic engagement, recent government notions of 'big society' and the imperative to become more involved in one's neighbourhood/network. It also highlights the role discussion forums can play in helping stigmatized/marginalized groups. We hope to influence policy makers on these important issues via the Sciencewise Expert Resource Centre for Public Dialogue in Science and Innovation (ERC).

Finally, we will continue to showcase our findings to charities and voluntary organisations engaged in the management of persons with ongoing illnesses, or those that exist to connect users with less mainstream interests since we have clearly demonstrated the utility of discussion forums for users' well-being and civic engagement.

(194 words)

You will be asked to complete an ESRC Impact Report 12 months after the end date of your award. The Impact Report will ask for details of any impacts that have arisen since the completion of the End of Award Report.

4. Declarations

Please ensure that sections A, B and C below are completed and signed by the appropriate individuals. The End of Award Report will not be accepted unless all sections are signed. Please note hard copies are **not** required; electronic signatures are accepted and should be used.

A: To be completed by Grant Holder

Please read the following statements. Tick **one** statement under ii) and iii), then sign with an electronic signature at the end of the section (this should be an image of your actual signature).

i) The Project

This Report is an accurate overview of the project, its findings and impacts. All co-investigators named in the proposal to ESRC or appointed subsequently have seen and approved the Report.	X

ii) Submissions to the Research Outcomes System (ROS)

Output and impact information has been submitted to the Research Outcomes System. Details of any future outputs and impacts will be submitted as soon as they become available. **or**	☐
This grant has not yet produced any outputs or impacts. Details of any future outputs and impacts will be submitted to the Research Outcomes System as soon as they become available.	X

iii) Submission of Data

Data arising from this grant have been offered for deposit with the UK Data Service. **or**	**X**
Data that were anticipated in the grant proposal have not been produced and the UK Data Service has been notified. **or**	☐
No datasets were proposed or produced from this grant.	☐