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Mental health promotion in the Internet age: A consultation with Australian young people to inform the design of an online mindfulness training program.

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Mindfulness training (MT) has been shown to lead to significant improvements in psychological distress and emotion regulation skills. The Internet has many advantages as a medium for building emotional skills in young people. The aim of this study was to involve young people in designing an online MT programme. A draft programme was initially designed based on a review of the literature and an established face-to-face programme for medical students. Twenty young people were then recruited through online advertising and 13 (age 16–26) interviewed. They were asked to comment on how useful, easy to use and enjoyable they found the proposed programme and how the draft version and its planned evaluation strategy could be improved. Interviewee responses were independently processed by two of the authors within a qualitative thematic analysis paradigm. The results showed that young people were eager to engage with the design of this health promotion programme and provided valuable input. All interviewees believed that young people would find the programme desirable. They provided a variety of suggestions about how training structure and content could be improved, how best it could be evaluated and how young people could be encouraged to engage with and complete the programme. It thus appears that online MT is a feasible mental health promotion strategy for young people and that it can be evaluated in a controlled trial. The result of this consultation process was the Mindful Awareness Training and Education (MATE) programme, which has been detailed.

Key words: mental health promotion; mindfulness; Internet; young people

Introduction

The negative psychological and health costs of unemployment have now been well established (Murphy & Athanasou, 1999; Paul & Moser, 2009). Two of the most widely accepted theories in the unemployment literature that have attempted to explain why unemployment has such negative effects are Jahoda's (1981) latent deprivation model and

Fryer's (1986) agency restriction model. Jahoda argued that it was the loss of five latent benefits of employment (time structure, activity, social contact, collective purpose, and status) that accounted for higher levels of psychological distress found in the unemployed, while Fryer argued that the elevated levels of psychological distress were due to the loss of the manifest benefit of employment (financial income). These models are not mu-

tually exclusive, with previous studies supporting both models. Creed and Macintyre (2001) together with Waters and Muller (2003) have argued for theory integration to provide a better explanation for the deterioration of well-being in the unemployed.

While researchers have already examined the relative contributions of the latent and manifest benefits to well-being, it has only been since the publication of the LAMB scale (Muller, Creed, Waters & Machin, 2005) that studies have been able to use one scale to adequately measure all five latent benefits together with the manifest benefit. The LAMB scale has now been used in a number of national and international studies and has been translated into German (see Selenko, Batinic & Paul, 2011). It is now timely to examine recent findings from these contemporary studies.

The current article aims to review current studies that have used the LAMB scale and report an overview of the recent findings with respect to the latent and manifest functions. Before the Muller et al. (2005) publication, a number of studies used an earlier version of the scale, which had a different number of items in each subscale and different scoring methods (reversed order). These will be mentioned only with respect to the findings. This article will specifically focus on published papers since 2005 using the 36-item version of the scale (Muller et al., 2005).

A Brief Review of Jahoda's and Fryer's Unemployment Theories

Before reviewing the recent findings, it is necessary to provide a brief synthesis of the research supporting Jahoda's and Fryer's theories to allow contextualisation and support for the need for ongoing research in this area using the LAMB scale.

Jahoda's (1981) latent deprivation theory is, perhaps, the most influential framework that has been proposed to account for the deterioration in well-being from unemployment. Jahoda proposed that, although people are compelled to work for the manifest benefit (financial income); it is the five latent benefits associated

with employment that allowed people to meet their psychological needs. Jahoda argued that: [individuals] have deep seated needs for structuring their time use and perspective, for enlarging their social horizon, for participating in collective enterprises where they can feel useful, for knowing they have a recognised place in society, and for being active. (1984, p. 298)

Each of the five latent benefits will be briefly discussed. In other research, the terms 'categories of experience' and 'latent functions' have been used to refer to the 'latent benefits'. In this article, 'latent benefits' and 'manifest benefits' will be used.

Employment imposes a time structure on the waking day. Studies comparing students, unemployed and employed participants have demonstrated that the unemployed report less structured and purposeful time use and lower life satisfaction, self-esteem and happiness. Furthermore, among the unemployed, those who perceived their use of time as more structured and purposeful reported higher levels of life satisfaction (Jackson, 1999; Martella & Maass, 2000; Waters & Moore, 2002). Employment also enforces activity. Enforced activity has been strongly correlated with psychological distress, and unemployed people with better access to the latent benefits typically engage in more active leisure activities compared to those with less access (Haworth & Ducker, 1991). Unemployed people who are highly active have also been shown to have better psychological well-being (Evans & Haworth, 1991).

Employment links an individual to goals and purposes that transcend their own. Collective purpose has been found to be associated with wellbeing in unemployed samples (Evans & Haworth, 1991; Haworth & Ducker, 1991), and correlated with better mental health across both work and leisure domains (Haworth & Paterson, 1995). Employment implies regularly shared experiences and contacts with people outside the nuclear family. When unemployed and employed samples are compared, the unemployed report less social support from close relations and authority figures (Jackson, 1999), and to be considerably less involved in social activities (Underlid, 1996). Unemployed men who report more contact with friends and rela-

tives outside their immediate family are also more likely to show subsequent improvements in mental health (Warr, 1987). Finally, employment defines aspects of personal status and identity. Status has been found to be associated with psychological health and to make a unique contribution to predicting well-being in adult (Creed & Macintyre, 2001) and youth samples (Evans & Haworth, 1991).

In contrast to Jahoda's latent deprivation model, Fryer (1986) argued that it was the loss of the manifest benefit (income), not the loss of the latent benefits, that was the main negative consequence of unemployment. Fryer (1995) believed individuals to be socially embedded agents who are actively striving for purposeful determination, attempting to make sense of, initiate, influence and cope with events in line with personal values, goals, expectations of the future in a context of cultural norm, traditions and past experience. (p. 270) Fryer emphasised two factors that were central in explaining the negative psychological costs of employment and psychological unemployment for most people. well-being than the direct, First, the unemployed person had greater difficulty in making any plans for the future; secondly, unemployment generally results in poverty. While Fryer acknowledged the role of reduced access to the latent benefits, he argued that they have a much less important role in explaining the negative impact of unemployment (Fryer & Payne, 1984). Rather, he argued that it was the lack of income that was the main driver of the mental health costs of unemployment.

Financial strain has consistently been related to lower levels of psychological well-being. For example, Rowley and Feather (1987) found that financial strain was significantly negatively correlated with wellbeing in their unemployed sample, and Feather (1990) found greater psychological distress and poorer life satisfaction and quality of life when levels of financial stress and strain were higher. Financial strain may also play an indirect role in influencing psychological wellbeing. Studies have demonstrated that those people reporting the greatest amount of financial strain also reported less time structure in

their normal day-to-day activities (Rowley & Feather, 1987; Ullah, 1990).

Integrating the Measurement of Latent and Manifest Benefits

Recently, researchers have suggested that consideration of the role of both the latent and the manifest benefits of employment is needed when investigating psychological well-being in the unemployed (Creed & Macintyre, 2001; Waters & Muller, 2003). It is now apparent that there is a more complex relationship between access to the latent and manifest benefits of employment and psychological well-being than the direct, linear relationships previously hypothesised. But, in order to test whether there are alternative models that may be better at explaining the negative effects of unemployment, researchers need access to more reliable and better validated tools to simultaneously measure the latent and manifest benefits proposed by Jahoda and Fryer. The LAMB scale was developed for this purpose. The LAMB scale measures time structure, collective purpose, enforced activity, status, social contact and financial strain using five 6-item subscales (Muller et al., 2005). Scores on the LAMB subscales range from 6 to 36 or 6 to 42 (depending on version) with higher scores indicative of greater access to the latent benefits, except for financial strain where a higher score indicates greater financial strain. Muller et al. (2005) reported the internal reliability coefficients for the six subscales to be 0.74 (time structure), 0.92 (social contact), 0.91 (collective purpose), 0.89 (enforced activity), 0.91 (status) and 0.93 (financial strain). Discriminant and criterion validity were also established.

The LAMB scale: Empirical studies

There have been 13 studies that have used the LAMB scale since its publication in 2005. In total, 5692 people have completed the LAMB scale, and it has been used in Australian and German samples. The LAMB scale has typically been used by researchers who are trying to gain a greater understanding of how the deprivation of latent and manifest

fits lead to various distress aspects such as anxiety, wellbeing, quality of life, and so on. There have also been researchers who have looked at LAMB as the outcome and seen what antecedent factors affect access to the benefits (for example, gender, gender and altruism and occupational status).

LAMB as the Independent Variable

E. Hassall, Muller and S. Hassall (2004) examined the LAMB scale and well-being in 193 unemployed people and 206 low-wage earners. Financial strain (LAMB subscale) was found to be an important predictor of well-being in low-wage earners whereas the latent benefits were predictors of well-being in the unemployed sample. S. Hassall, Muller & E. Hassall (2005) examined the relationship between Protestant work ethic and LAMB in 399 employed and unemployed people. They found that specific components of Protestant work ethic had a range of different relationships with individual LAMB subscales. Muller, Creed and Francis (2004) examined the association between LAMB and spirituality in 231 unemployed people. The strongest association was found between well-being and the LAMB subscales of financial strain, social support and time structure. Spirituality mediated between LAMB subscales of social support and collective purpose and well-being. Paul and Batinic (2010) surveyed a sample of 998 German unemployed and employed people and people out of the labour force. As expected, decreased access to all latent benefits was associated with distress but access to latent functions was best among young men from higher social classes who lived in an intimate relationship in a comparatively large household with children.

Hoare and Machin (2006), in a study of 371 unemployed people, found that deprivation of the latent benefits measured by the LAMB scale was able to predict psychological distress after controlling for other key correlates. It accounted for 13% of the variance with time structure being the most unique predictor.

Creed and Klisch (2005) found significant associations between psychological distress and the LAMB subscales of social support, collective purpose and financial strain in a sample of 239 unemployed adults. From the correlation matrix, significant associations ($r > .32$; Tabachnik & Fidell, 1996) were found between psychological distress and social support collective purpose, financial strain, negative future perspective, positive future perspective and neuroticism. Specifically, high levels of distress were associated with low levels of social support, collective purpose, positive future perspective and neuroticism, and high levels of financial strain and negative future perspective. Social support was further associated positively with collective purpose and status, and negatively with financial strain and negative future perspective. Collective purpose was further associated positively with status, and negatively with financial strain. Activity was positively associated with status. This analysis indicated that well-being was positively associated with access to the latent benefits of employment. Associations between psychological distress and time structure, activity and status were in the expected direction, but were weaker, accounting for less than 10% of the variance in each correlation. This analysis also indicated that well-being was positively associated with access to the manifest benefits of employment and future orientation.

Creed and Bartrum (2008) examined LAMB and personal control in a group of 214 unemployed adults in relation to well-being. Personal control explained additional variance over and above the latent and manifest benefits; it moderated the effect of both activity and financial strain on well-being; and it mediated the relationship between financial strain, time structure, collective purpose, status and wellbeing. Step 1 of the hierarchical regression analysis reported indicates significant associations between the latent benefits of time structure, collective purpose and status, and psychological distress, and a significant association between financial strain and psychological distress.

Selenko, Batinic and Paul (2011) investigated LAMB using a German translation of the

scale (LaMB) in a sample of unemployed and employed people and people out of the labour force. They tested the assumption that lack of access to the latent benefits of work led to psychological distress in a and financial strain in a sample sample of 1026 persons, both cross-sectionally and longitudinal in a four-wave study. They found that employed and unemployed people and people out of the labour force had differential access to the latent benefits and that deprivation of latent benefits led to a decrease in psychological health six months later.

Muller and Read (2009) used the 36-item version of the LAMB in a study of 123 Australian retirees and found that increased access to the latent and manifest benefits was correlated with increased quality of life. Furthermore, collective purpose (LAMB subscale) was found to be the only significant unique predictor of quality of life. Mitchell (2010) examined altruism, LAMB and well-being in 141 unemployed people.

She found that altruism was significantly associated with access to LAMB and that LAMB accounted for 33% of the variance in depression with social support (LAMB subscale) being the most important unique predictor.

In summary, research using the LAMB scale has consistently predicted that lack of access to the latent and manifest benefits of employment is associated with decreased psychological well-being. This pattern has held across various samples, such as in low-wage earners, people with spiritual beliefs, people who are unemployed or out of the labour force, and people with negative and positive future perspective. Furthermore, studies have identified different latent benefits as having different levels of association with well-being (see Table 1).

LAMB as the Dependent Variable

More recent studies have used the 36-item version of the LAMB with a range of participants. Batinic, Selenko, Stiglbauer and Paul (2010) investigated whether LAMB is different in occupations with different levels of status. They used a German sample of 565 and an online sample of 826, and found sup-

port for their argument that higher levels of status had better access to LAMB but that only time structure and status (LAMB subscales) had unique abilities to mediate. A further study compared employees in high-level and low-level positions. Higher-level employees reported significantly better psychological well-being than workers in low-level positions. Concerning latent functions, respondents higher up the work hierarchy reported significantly better access to all latent functions but status. Inter-correlations between level of occupation and psychological well-being, and latent benefits (overall and in detail) were significant or marginally significant, except for status. Considering each of the latent functions individually, social contact and activity significantly contributed to mediation beyond any other mediator (specific indirect effects).

Muller, Goddard, Creed, Johnson and Waters (2006) examined gender differences on the impact of the 'work for the dole' program on well-being and access to latent benefits in 45 unemployed people. Gender differences were only found on the subscale of time structure, with females reporting greater access.

Hoare and Machin (2010) focused on the impact of re-employment on access to both the latent and the manifest benefits of employment and mental health in a study of 115 unemployed Australians. Participants who gained employment (N = 58) were better off financially, reported greater access to social contact and a better time structure and had significant improvements in their mental health when followed up. Participants who remained unemployed showed no change over time.

In summary, gender, occupational status and employment status predict latent and manifest benefits that positively affect well-being.

Conclusion

LAMB scale studies have demonstrated the efficacy for its use as a scale to test Jahoda's and Fryer's theories and to identify the latent

and manifest benefits of employment. More specifically, the LAMB scale also allows the identification of specific latent or fest benefits that may be deprived in different samples and the consequences of this deprivation (see Table 1). It is of interest that time structure, social support and financial strain were the most commonly reported. Furthermore, LAMB has been used with a wide variety of populations (for example, retirees, volunteers, people with spiritual beliefs, the employed, people out of the labour force and the unemployed) across two countries, Australia and Germany. Overall, there is justification for its further use as a measure that can be used to predict well-being in the unemployed. By examining specific subscales, it is possible that LAMB may be used as a tool for assisting the design of interventions to tackle those latent and manifest benefits that are not being accessed that negatively affect well-being.

The LAMB scale has now gained search momentum. Evidence of this has been its recent translation and use in German studies, its translation into Portuguese (personal communication with Marta Sousa Ribeiro, 20 December 2005) and recent requests for permission to translate it into Icelandic (personal communication Klargaard, 26 September 2010) and Japanese (personal communication, Miho Takahashi, 29 September 2011). It is timely that more attention be given to further use of the subscales in determining interventions and it is recommended that a metaanalysis of the LAMB scale be conducted.

The global financial crisis has seen a rapid rise in the unemployment rates of many countries. As such, urgent research is required to inform policy-makers and to assist in the development of effective unemployment interventions. We believe that the synthesis of findings presented above is necessary information for researchers and policy-makers to use in order to minimise the psychological distress that unemployed people face. Future research could use the LAMB scale to assist in designing and evaluating interventions that focus on providing access to latent benefits as a means of increasing well-being in a range of different populations.

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Table 1: Studies Showing LAMB Subscales That Relate to Well-being

Author/s	Country	Year	LAMB subscale/s
Hassall, Muller & Hassall	Australia	2004	Financial strain
Muller, Creed & Francis	Australia	2004	Financial strain, social support and time structure
Creed & Klisch	Australia	2005	Social support, collective purpose, financial strain
Hassall, Muller & Hassall	Australia	2005	No overall LAMB subscale relationship reported
Hoare & Machin	Australia	2006	Time structure
Muller, Goddard, Creed, Johnson & Waters	Australia	2006	Time structure (females only)
Creed & Bartrum	Australia	2008	Time structure, collective purpose, status, financial strain
Muller & Read	Australia	2009	Collective purpose
Batinic, Selenko, Stiglbauer & Paul	Germany	2010	Time structure, activity, status, social contact
Hoare & Machin	Australia	2010	Social contact, time structure, financial strain
Mitchell	Australia	2010	Social support
Paul & Batinic	Germany	2010	All LAMB subscales
Selenko, Batinic & Paul	Germany	2011	All subscales had differential access