

Les Mills Lab: LES MILLS TONE and Postpartum Anxiety.



Introduction

Women who have just had a child are much more likely to suffer anxiety and other mental health issues than others, and in recent years their suffering has been amplified. According to a 2020 study¹, 40 percent of postpartum women now report depression (compared to 15 percent pre-pandemic) and 72 percent report moderate-to-high anxiety (compared to 29 percent pre-pandemic).

Research shows postpartum women who gradually return to exercise four to six weeks after delivery report lower depression and anxiety than those who do not meet the guidelines for physical activity².

Hypothesis

Women between six and nine months postpartum will show reduced levels of stress and anxiety following eight weeks of LES MILLS TONE™.

Method

Twenty-one women volunteered to participate in a bi-weekly group exercise program for 8 weeks.

All women were at least 6-weeks postpartum and had been given physician clearance to begin exercising again. Classes were offered twice per week at an outdoor location due to restrictions on indoor exercise during the study period which coincided with the COVID-19 pandemic.

The group exercise intervention was the 45-minute group fitness class LES MILLS TONE.

Participants were given the option to bring their baby to the group fitness class to help reduce potential barriers with exercise engagement. In each class, the instructor provided options to either increase or decrease the intensity of each exercise. In addition, options for using the baby as weight if the mother had to be attending to the baby during exercise were provided.

Before and after the 8-week exercise intervention, participants completed online questionnaires. For mental health outcomes, in addition to state anxiety, postpartum depression, trait anxiety, and perceived stress were measured. Depression was assessed using the Edinburgh Postnatal Depression Scale.

Results

The women reported a significant reduction in state anxiety (i.e. anxiety in the current moment). This decreased from an average of 3.6/10 (where 0 was no anxiety) before each exercise session, to 1.6/10 immediately after each session – a decrease of 55%.

At the end of the eight-weeks, the women reported significantly lower levels of state anxiety than at the start of the program, falling from 3.3/10 to 1.9/10 – a 42% decrease.

There were also improvements in depression and perceived stress, with small to moderate effect sizes, but these changes were not statistically significant.

As well as feeling more motivated to exercise, the mothers found the classes contributed to their basic psychological needs by increasing feelings of autonomy, competence and perceptions of bonding and relatedness.

Conclusions

Our 8-week bi-weekly exercise program for new mothers significantly improved state anxiety pre-post each exercise class, and from pre to post 8-week intervention. There were also improvements in depressive symptoms, perceived stress and trait anxiety (i.e. general anxiety). In addition, we found a significant improvement in meeting basic psychological needs, including autonomy and competence, and an improvement in autonomous regulation (i.e. an increase in internal motivation to engage in exercise).

[See the full study report here.](#)

References

1. Davenport, MH., Meyer, S., Meah, VL., Strynadka, MC., Khutana, R. (2020). Moms are not OK: Covid-19 and maternal mental health. *Frontiers in Global Women's Health*. 19.
2. Kolomařiska-Bogucka, D., & Mazur-Bialy, AI. (2019). Physical activity and the occurrence of postnatal depression-A systematic review. *Medicina (Kaunas, Lithuania)*. 55(9):560.