Journal of Agromedicine

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/wagr20

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To cite this article: Amy E Peden, Faye McMillan, Dennis Alonzo & Richard C Franklin (2024) Pilot Evaluation of a Co-Designed Gamified Farm Injury Prevention Educational Resource for Adolescents, Journal of Agromedicine, 29:4, 615-625, DOI: 10.1080/1059924X.2024.2382716

To link to this article: https://doi.org/10.1080/1059924X.2024.2382716

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Published online: 24 Jul 2024.

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JOURNAL OF AGROMEDICINE
2024, VOL. 29, NO. 4, 615–625
https://doi.org/10.1080/1059924X.2024.2382716

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Pilot Evaluation of a Co-Designed Gamified Farm Injury Prevention Educational Resource for Adolescents

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ABSTRACT

Objectives: Adolescents are at-risk of fatal and non-fatal injuries in the farm environment. School-based agricultural safety and farm injury prevention education is likely to be more effective when utilizing co-designed and gamification principles; however, this needs to be tested. This study examined data from a pilot evaluation of a co-designed farm injury prevention gamified educational resource for adolescents.

Methods: Online, anonymous surveys were conducted with students studying agriculture in regional Australia who had previously participated in the co-design process to develop "Calm Your Farm". Three courses were developed (vehicles, workshop, and water safety) and before and after playing each of the courses for the first time, students completed survey questions regarding self-reported knowledge on the course topic, and assessment of content, design, ease of play, and how much they learned. Survey data were analyzed using descriptive statistics, chi square tests of association, and independent sample t tests.

Results: We analyzed 66 responses (66.7% male; 60.6% aged 13 years). Staged course release meant all respondents assessed the vehicle and workshop courses, while 58% assessed the water safety course. Vehicle and workshop courses were rated 7.64 out of a possible 10 (SD = 1.85) and 7.65 (SD = 1.78), respectively, for the information presented, slightly higher than water safety (7.47 [SD = 1.91]). Statistically significant improvements in self-reported knowledge post play were seen among boys for the water safety course (63% said knowledge improved; $X^2 = 4.98$; $p = .026$) and 13-year-olds for vehicles (35%; $X^2 = 4.31$; $p = .038$) and workshop safety (50%; $X^2 = 4.29$; $p = .038$). Respondents indicated being more likely to replay the game at school ($M = 6.62$ [SD = 2.96]) than at home ($M = 5.57$ [SD = 3.07]). Of respondents, 61% ($n = 40$) agreed that "Calm Your Farm" taught them more about farm safety and was more fun than other farm safety education previously received. Tractor safety (62%), chemical safety (58%), and firearm safety (58%) were the most popular topics suggested to be added to the game.

Conclusion: The co-design and gamification approach taken with "Calm Your Farm" appeared to be successful in improving self-reported knowledge around farm injury prevention and was perceived by 62% of the respondents as being fun and educational. Future expansion should incorporate student suggested topics.

KEYWORDS
Injury; farming; rural; adolescence; agriculture

Introduction

Adolescence is a life stage during which a significant, yet neglected, injury burden is experienced. Research indicates unintentional injury is a leading cause of fatalities and morbidity in adolescents aged 10–24 years,[1] yet investment in injury prevention for this age group lags behind that of other health and wellbeing issues and investment in younger children.[2] This lack of investment is further evident in the dearth of high-quality evidence regarding effective interventions for preventing injuries other than sports and road transport injuries among this age group.[3]

This knowledge gap, when it comes to unintentional injury prevention as it relates to adolescents, also encompasses farm injury. Despite national and sub-national epidemiological analysis of farm injury mortality and morbidity, as well as data on deaths among agricultural workers,[4,5] there remains a lack of disaggregated data on these incidents by age to identify the true injury burden among adolescents.[6] In spite of this data gap, there remains an imperative to influence safety for this age group.[7]

This data gap makes injury prevention challenging given age-related variance in burden and risk,[8] as well as contributing to higher injury

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rates seen in rural and remote areas,[9] including on farms.[10] Adolescents, more so than younger children, move from interacting with the farm as a home environment and a place of recreation to a workplace, which can bring with it new and greater injury risks and hazards, including those posed by vehicles, machinery, livestock, and water bodies.[11]

In Australia, research has identified that a third of all farm-related fatalities in children and young people occur to children who are visitors to the farm environment.[12] This indicates the importance of systems-level approaches,[13] such as education via the school system, to capture the total population of those at risk, not just those who live and work on farms.

Participatory approaches,[14] such as co-design, have been shown to be effective in the development of a range of educational interventions for adolescents, including by making content more age-appropriate and engaging for the user, as well as engaging participants in the education process, making the developed materials more likely to be successful in their goal.[15–17]

Similarly, applying the principles of gamification to education seeks to improve educational outcomes through the use of gaming elements, which encourage repeat play, goal attainment, and problem solving, thus creating more appealing and engaging educational materials.[18,19] Though several studies report the use of gamification in agriculture,[20–22] including in a higher education setting,[23] this process has not previously been focused on injury prevention in the farm environment nor in Australia. The use of gamification for adolescents is necessary, given the technological literacy adolescents now have, with 90% of Australian adolescents aged 14–17 owning a mobile phone, which almost all (97%) use to access the internet.[24]

With the overarching aim of improving awareness of injury hazards and risks in the farm environment for adolescents, the principles of gamification and co-design were applied to farm injury prevention for adolescents in Australia. The end product, a gamified injury prevention educational resource, "Calm Your Farm" (available online at www.calmfarm.education), was co-designed with students studying agriculture at three secondary schools in regional Australia.[25] This study aims to examine the results of a pilot evaluation of this educational resourcein particular, the acceptability and impact of the courses within the game on self-reported knowledge gain.

Methods

Study design

This is a cross-sectional study comprising analysis of survey data. This study used a utilization-focused evaluation to explore the usefulness and the immediate outcome in terms of increased knowledge of the end-users of the resource.[26] This evaluation approach guides our ultimate goal of using the findings and process to increase the likelihood of acceptability and utilization and improvement of "Calm Your Farm" as an educational resource.

Game development

Development of "Calm Your Farm" commenced with a review of published literature to identify leading injury mechanisms for adolescents (building on the wider work of Adams et al.[11]). This was followed by content design by experts in injury prevention, farm injury, adolescent health, education, and gamification, as well as qualitative research with adolescents studying agriculture and their teachers. Qualitative research, in the form of focus groups with students at three regional high schools, covered a diverse range of topics including knowledge of injury risks and hazards on the farm, previous experiences of injury among themselves or people they knew, current farm safety information received, and preference for future farm safety and injury prevention information, including game-based learning. One-on-one teacher interviews also discussed awareness of injury within the school and broader community, students' experiences of farm injury, current farm safety information offered, and feasibility of provision of gamified farm injury prevention in the school environment.

Once the content was developed, it was mapped against state and territory-level and national-level school curriculums, and draft lessons plans were

developed. With the assistance of a game developer, content was transferred into a gamified scenario-based educational resource. Available online, "Calm Your Farm" takes players through character selection and movement of a character through different scenarios identifying injury hazards, risks, and risk reduction strategies across four courses: vehicles, workshop, water, and paddock (Figure 1).

To support implementation in schools, the Calm Your Farm website also has a Learning Materials tab (www.calmfarm.educaton/learning-materials) that includes safety messages for integration into lessons, curriculum links, and units of work featuring suggested teaching, learning, and assessment, including extension activities to supplement game play in-classroom. In addition, the Courses tab (https://www.calmfarm.education/courses) provides information on the number of lessons within each course and estimated duration in minutes.

School identification and participant recruitment

Schools, and thus students and their teachers, were identified via the authors and word-of-mouth. To be eligible for participation in the co-design and pilot evaluation, schools needed to be based in regional or rural areas, teach agriculture to students aged 12–14 (Years 7 and 8—Australia has classes from Kindergarten/Prep and then year 1 to year 12), represent geographical areas with a diversity of primary industries and agricultural types, and be willing to participate within the project timeframes. The final schools were one public secondary school in the Australian state of Tasmania and two independent schools that teach both primary and secondary students in the state of New South Wales.

Survey tool development

To conduct a pilot assessment of the content and design of "Calm Your Farm" prior to its public release, an online survey was developed using Qualtrics. The survey was developed by author AP and piloted by authors DA and RF (farm injury prevention and educational experts) to assess face and content validity prior to data collection commencing. Due to phased game development with staged course release, two schools completed questions about the vehicles and workshop courses, while a third school completed additional questions regarding the course on water safety. Two survey tools were utilized, one with questions on the vehicle and workshop courses and the second with the additional questions for the water safety course.

Questions on each course began with asking students to self-assess their knowledge of vehicle/workshop/water safety on a 5-point scale (nothing at all; not much; a bit; heaps; totally expert). Respondents were then asked to assess each of the following aspects of the respective course on a 10-point scale: the information presented and how it looks (10-point scale ranging from 1 terrible to 10 excellent); how easy it is to play (10-point scale ranging from 1 being really hard to 10 being really easy); and how much they learned (10-point scale ranging from 1 being nothing at all to 10 lots).

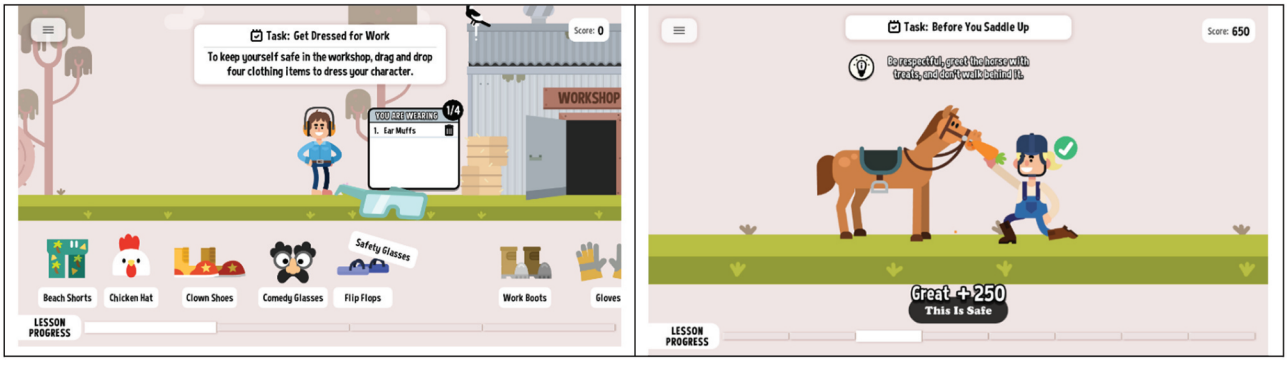

Figure 1. Screenshots from "calm your farm" game.

For each course, respectively, students were presented with two non-mandatory free text questions: 1) *Is there anything else on the topic of vehicles that is missing and needs to be added?* and 2) *Any other feedback on the vehicles/module you'd like to share?* The set of questions for each course then finished with a question asking respondents to assess their level of knowledge on the respective course topic after having completed the course on a 5-point scale (much better; somewhat better; stayed the same; somewhat worse; much worse).

All respondents were also asked to assess the likelihood of recommending the game to their friends, playing the game again on their own time, and playing the game again at school next year on a scale of 1 to 10 (1 being not at all likely and 10 being extremely likely). Respondents were also asked to assess their level of agreement that "Calm Your Farm" taught them more about farm safety than other farm safety programs they have done and that "Calm Your Farm" was more fun than other farm safety education they had received on a 5-point scale (strongly agree; somewhat agree; neither agree nor disagree; somewhat disagree; strongly disagree).

Respondents were then asked to indicate which other farm safety topics they would like to see added to the game from multi-select options of: firearm safety; safety during harvest; fire safety; mental health information; flood safety; chemical safety; tractor safety; farm machinery; and other (please specify). Finally, respondents were presented with an optional free text field to add any final comments they would like to make about the game. Respondents were also asked to provide basic demographic information by answering questions regarding their gender, age, school year, and school name.

Data collection

Data were collected at the participating schools in November and December 2023. Respondents used their schools provided laptops and first navigated to the survey URL that had been written on a board at the front of the classroom. Respondents completed the informed consent and demographic questions and answered the first question about their self-assessed level of knowledge on vehicle safety. After this question, the survey prompted them to the "Calm Your Farm" vehicles course, which opened in a new tab (https://www.calmfarm.education/product/vehicle-safety). They were advised to complete the course and then return to the survey to answer the remaining questions on that course before repeating the process for the second course (all schools) and third course (one school only). Author [blinded for review] was on site to facilitate the data collection with support from class teachers who had previously also participated in the co-design process.

Data cleaning, coding, and analysis

As two different survey tools were used (one with vehicle and workshop course questions and a second with the added water safety course questions), the two datasets were downloaded from Qualtrics in SPSS format and merged. The majority of the questions were mandatory and closed responses, reducing the amount of data cleaning and coding that needed to be conducted. Prior to analysis commencing, one incomplete response was removed.

Descriptive statistics were used to analyze the sample. For questions that requested responses on a 10-point scale, means were calculated overall and results by gender were compared using independent samples t-tests, assuming equal variance. For questions that requested responses on a 5-point scale, these were recoded into binary responses, and chi square tests were calculated. Statistical significance was deemed $p < .05$, except where a modified Bonferroni correction was applied (assessment of difference between three ages). The pre-course knowledge self-assessment answer options were combined into a little knowledge (responses of nothing at all, not much, and a bit) and a lot of knowledge (heaps and totally expert). Post-course knowledge assessment answer options were combined into Improved (much better, somewhat better) and No improvement (stayed the same, somewhat worse, much worse). Post-course play questions regarding level of agreement that "Calm Your Farm" taught them more about farm safety than other farm safety programs and

was more fun than other farm safety education they had received, these 5-point scales were collapsed into a binary response of agree (strongly agree, somewhat agree) and disagree (neither agree nor disagree, somewhat disagree, strongly disagree). For the free text question, responses were thematically coded by author [blinded for review], with example responses reproduced verbatim to illustrate identified themes.

Ethics and consent

Ethics approval was granted by the University of New South Wales Human Research Ethics Committee (approval number: HC220791). Parental permission for student participation in the study was gained via information sheets and returned signed consent forms which were distributed via the schools before the research began. Additional consent from the students was gained via the survey (Question 1).

Results

In total, 66 responses were analyzed. The sample was two-thirds male ($n = 44$; 66.7%) and most commonly 13 years-of-age ($n = 40$; 60.6%). The mean age of respondents was 13.18 years (SD = 0.61). Due to the staged release of courses as discussed previously, all respondents ($n = 66$) completed questions on the vehicle and workshops courses, with only 38 participants (57.6%) completing questions on the water safety course. (Table 1).

When asked to assess the information presented, the vehicle and workshop courses were rated similarly at 7.64 (SD = 1.85) and 7.65 (SD = 1.78) out of 10, respectively, with a slightly lower mean score for the course on water safety (7.47 [SD = 1.91]). Across each of the three courses, boys were more likely to rate the information presented higher than females. When asked to assess course design (how it looks), girls consistently ranked game appearance higher than boys across all three courses. Ease of game play was higher for both the vehicles and workshop courses at 7.44 (SD = 2.30) and 7.41 (SD = 2.03), respectively, higher than the water safety course (7.26 [SD = 2.20]). Boys rated how much they had learned consistently higher than girls across all three courses, with the most pronounced difference seen in the water safety course, where the mean boys score was 6.89 (SD = 2.59) compared to the mean score of girls being 5.91 (SD = 3.24). Independent t-tests identified no statistically significant differences between boys and girls for any of the mean score for each module (Table 2).

Table 1. Respondent demographics ($N = 66$).

Characteristic	Number	%
Gender		
Female	22	33.3
Male	44	66.7
Other gender	0	0.0
Age in years		
12	7	10.6
13	40	60.6
14	19	28.8
School year		
Year 7	42	63.6
Year 8	24	36.4
Modules assessed		
Vehicle safety	66	100.0
Workshop safety	66	100.0
Water safety	38	57.6

When comparing pre-course play self-assessed knowledge with self-assessed change in knowledge post-course play, statistically significant improvements in knowledge were reported overall in the water safety course, with 63.2% of respondents indicating their knowledge had improved ($X^2 = 3.89$; $p = .049$). This result is likely driven by the statistically significant improvement in water safety knowledge among boys (63.0%; $X^2 = 4.98$; $p = .026$). Significant improvements in knowledge were also seen among students aged 13 years for the vehicles (35.0% reported improved knowledge; $X^2 = 4.31$; $p = .038$) and workshop courses (50.0% reported improved knowledge; $X^2 = 4.29$; $p = .038$) (Table 3).

After playing all courses available to them, respondents were asked to assess, out of 10, their likelihood of recommending the game to friends and of repeat play either at home or at school next year. Lower mean scores were received for likelihood of playing the game again at home (overall mean 5.57 (SD = 3.07) compared to likelihood of playing the game again at school (overall mean 6.62 [SD = 2.96]). There were no statistically significant differences between the mean scores of boys and girls across any question (Table 4).

Table 2. Assessment of courses, mean score out of 10 by course type and gender, independent t test (*p* value).

	Vehicles (*N* = 66)				Workshop (*N* = 66)				Water (*N* = 38)			
	Total (SD)	Boys (SD)	Girls (SD)	T test (*p* value)	Total (SD)	Boys (SD)	Girls (SD)	T test (*p* value)	Total (SD)	Boys (SD)	Girls (SD)	T test (*p* value)
Information presented	7.64 (1.85)	7.68 (1.65)	7.55 (2.22)	t (df = 64) = 0.281, *p* = .780	7.65 (1.78)	7.75 (1.59)	7.45 (2.13)	t (df = 64) = 0.634 *p* = .528)	7.47 (1.91)	7.52 (1.93)	7.36 (1.96)	t (df = 36) = 0.223 (*p* = .825)
How it looks	7.59 (1.95)	7.39 (1.88)	8.00 (2.05)	t (df = 64) =–1.212, *p* = .230	7.68 (1.95)	7.52 (1.82)	8.00 (2.18)	t (df = 64) = –0.938 (*p* = .352)	7.66 (1.65)	7.59 (1.65)	7.82 (1.72)	t (df = 36) = –0.378 (*p* = .708)
How easy it is to play	7.44 (2.30)	7.50 (2.12)	7.32 (2.68)	t (df = 64) = 0.300, *p* = .765	7.41 (2.03)	7.36 (2.17)	7.50 (1.77)	t (df = 64) = –0.255 (*p* = .799)	7.26 (2.20)	7.44 (2.33)	6.82 (1.89)	t (df = 36) = 0.791 (*p* = .434)
How much you learned	6.15 (2.48)	6.18 (2.28)	6.09 (2.91)	t (df = 64) = 0.139, *p* = .890	6.21 (2.50)	6.32 (2.53)	6.00 (2.47)	t (df = 64) = 0.485 (*p* = .629)	6.61 (2.79)	6.89 (2.59)	5.91 (3.24)	t (df = 36) = 0.983 (*p* = .332)

Almost three-fifths of respondents agreed that "Calm Your Farm" taught them more about farm safety than other programs and that it was more fun than other farm safety education previously received ($n = 40$; 60.6%, respectively). There were no significant differences by gender of respondent and, when a Bonferroni correction was applied, no significant difference by age in years (Table 5).

Finally, respondents were asked which topics they would like to see added to the game. The most popular topics were tractor safety ($n = 41$; 62.1%), chemical safety, and firearm safety ($n = 38$; 57.6% respectively). The least popular was mental health information ($n = 15$; 22.7%). Additional free text options included animal and livestock safety ($n = 5$; 7.6%) or road safety (including trucks; $n = 2$; 3.0%) (Table 6).

Final comments included dislike of the water safety course ("It is good just the water one is a bit boring") and how fun the game is ("it was great and fun to play, very educational" and "this educational web game is a pretty good thing for classrooms to learn classroom safety").

Discussion

Despite persistent farm fatal and non-fatal injury rates among adolescents,[11] there remains limited focus on farm safety and injury prevention among this age group, and an absence of co-designed and gamified educational resources on this topic.[27] In conducting this pilot evaluation of a co-designed farm injury prevention and safety promotion educational game (Calm Your Farm), we have identified the game content and design is acceptable and fun for our target age group, as well as having resulted in self-reported knowledge gain.

Analysis of pre- and post-play self-reported knowledge indicated statistically significant improvement in knowledge regarding water safety for 63% of male participants. This is a pleasing result, especially considering males are at increased risk of drowning compared to females across almost all age groups.[28] This finding may add to the limited literature regarding drowning prevention interventions aimed at regional and remote populations.[29] Dedicated promotion of the game in regional and remote farming communities, particularly those with a high exposure to water

Table 3. Pre-course knowledge assessment and post-course knowledge change overall and by gender, X^2 (p value).

	Vehicles ($N = 66$)					Workshop ($N = 66$)					Water ($N = 38$)				
	Pre		Post			Pre		Post			Pre		Post		
	A little	A lot	Improved	No improvement	X^2 (p value)	A little	A lot	Improved	No improvement	X^2 (p value)	A little	A lot	Improved	No improvement	X^2 (p value)
Total	33	33	38	28	0.92 ($p = .319$)	41	25	37	29	1.062 ($p = .303$)	16	22	24	14	3.89 ($p = .049$)
Gender															
Boy/male	23	21	26	18	2.19 ($p = .139$)	26	18	23	21	0.75 ($p = .387$)	10	17	17	10	4.98 ($p = .026$)
Girl/female	10	12	12	10	0.15 ($p = .696$)	15	7	14	8	0.19 ($p = .665$)	6	5	7	4	0.05 ($p = .819$)
Age in years															
12 years	1	6	4	3	1.56 ($p = .212$)	1	6	3	4	0.88 ($p = .350$)	0	4	1	3	-
13 years	24	16	18	22	4.31 ($p = .038$)	28	12	20	20	4.29 ($p = .038$)	10	9	10	9	2.55 ($p = .110$)
14 years	8	11	16	3	0.112 ($p = .737$)	12	7	14	5	0.83 (p = .363)	6	9	13	2	1.54 ($p = .215$)

Table 4. Post course assessment mean score (SD) of likelihood of recommending game and repeat play at home or school overall, by gender independent t test (*p* value).

	Total (SD)	Boys (SD)	Girls (SD)	t test (p value)
Likelihood of recommending to friends	6.74 (2.69)	7.11 (2.53)	6.00 (2.90)	t (df = 64) = 1.608, $p = .113$
Likelihood of playing again on own time	5.50 (3.10)	5.80 (3.01)	4.91 (3.25)	t (df = 64) = 1.099, $p = .276$
Likelihood of playing again at school next year	6.67 (2.97)	7.11 (2.76)	5.77 (3.22)	t (df = 64) = 1.758, $p = .084$

Table 5. Agreement of game for learning and fun compared to other farm safety education received, overall and by gender and age group, X^2 (*p* value).

	Learned more than other farm safety programs			More fun than other farm safety education		
	Agree	Disagree	X^2 (*p* value)	Agree	Disagree	X^2 (*p* value)
Total	40	26	-	40	26	-
Gender						
Boy/male	27	17	0.032 ($p = .859$)	28	16	0.508 ($p = .476$)
Girl/female	13	9		12	10	
Age in years						
12 years	3	4	6.458 ($p = .040$)	4	3	6.354 ($p = .042$)
13 years	21	19		20	20	
14 years	16	3		16	3	

Table 6. Descriptive statistics of additional topics suggested by students to be covered by the game.

Topic	N	%
Tractor safety	41	62.1
Chemical safety	38	57.6
Firearm safety	38	57.6
Farm machinery	36	54.5
Fire safety	34	51.5
Safety during harvest	33	50.0
Flood safety	29	43.9
Mental health information	15	22.7

bodies due to water storage needs, must be conducted in the future to ensure good reach in disadvantaged and at-risk populations.[30]

The collaborative game development process was specifically undertaken via the school system with students and their teachers to maximize uptake of the resource in a school environment. This was further strengthened by the development of lesson plans and promotion of the curriculum links within the course content. A systems-level approach[13] to enhancing farm injury prevention education among adolescents, such as population-level coverage provided by the school system, is vital given visitors to the farm environment represent a third of all child and adolescent farm-related fatalities in Australia.[12] Embedding this material in a school setting is also important given the current study's findings that students reported being more likely to play the game again in the school environment, as opposed to at home. Additionally, embedding this education within the school system also represents one of the last opportunities to ensure adolescents have a strong knowledge base regarding farm safety and injury prevention before entering the workforce,[31] which may then lead to improved safety outcomes.

Despite the lower likelihood of repeat game play at home when compared to school, study results indicated that 61% of the respondents felt the game taught them more about farm safety and was more fun than other education they had previously received on the topic. This lends further support to the use of co-design and gamification principles that have shown to enhance engagement and learning, as has been seen in other domains.[32,33]

Finally, for the first iteration of courses, the game focused on unintentional injury, covering topics such as vehicle safety (a known on and off farm challenge[34]), hazard recognition, chemical safety, use of personal protective equipment in a workshop setting, and water safety, including the steps to perform cardiopulmonary resuscitation. However, 23% of the respondents thought future iterations of the game should include information on mental health, an area requiring further attention among farmers.[35] This will be an important addition to the game in the future, given the higher intentional injury rates in rural areas in Australia when compared to metropolitan areas[9] and rising suicide rates among farmers.[36] The development of new content also presents the

opportunity to diversify game types within courses to assess which game types foster increased engagement and more effective learning.

Strengths and limitations

This study is the first, to the best of our knowledge, to evaluate a co-designed and gamified farm injury prevention educational resource for adolescents in Australia. It provides useful insights into the acceptability and impact of the game on self-reported knowledge, as well as provides support for the use of participatory approaches and gamification in farm injury prevention. However, it is not without its limitations. The study is cross-sectional in nature and reflects only the views of those who participated in the co-design process and who were surveyed for this study. The face and content validity of the survey tools were not assessed with respondents in the desired age range before data collection commenced. Although the data were collected from three diverse locations that represent different types of primary production, not all farming types are reflected in the cohort. There is a need for further research with teens living and working on farms with different types of agricultural production to represent the diversity of agriculture, and thus injury risk, in Australia. Additionally, this represented a pilot evaluation with only small numbers, albeit good participation from those who collaborated on game design. Due to timeframes around successive course release, not all respondents assessed all courses, and two different survey tools (the original tool extended to include the additional course) were utilized. Overall, the feedback was positive; however, there was one respondent who was not. The responses of this student may be genuine or may have been rushed due to inattention, dislike of the task, or by deliberately using negative responses. Finally, due to game design and to maximize uptake of the game in a school setting, game play initiates immediately without sign-up. As such, we were not able to capture objective measures of learning via game play nor link these to survey respondents' subjective measures of knowledge gain.

Conclusion

The recognition and prevention of farm injury among adolescents is an important, yet neglected, area that should be supported via education. Our co-designed and gamified farm injury prevention educational resource for adolescents appears to be acceptable, resulting in knowledge gain. Future expansion of game content should incorporate student suggested topics, and future promotion should target use in a school setting to maximize population level coverage.

Acknowledgments

The authors would like to sincerely thank the students and teachers who contributed to the co-design process.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work is supported by the Australian Government Department of Agriculture, Fisheries and Forestry via the National Farm Safety Education Fund Program [grant number RG212914]. Author AEP is funded by a National Health and Medical Research Council (NHMRC) Emerging Leadership Fellowship [Grant ID: APP2009306]

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Data availability statement

Data are available upon reasonable request to author a.peden@unsw.edu.au

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