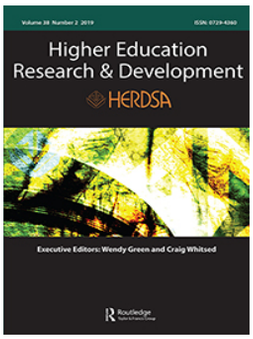

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Creative arts outreach initiatives in schools: effects on university expectations and discussions about university with important socialisers

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ABSTRACT

For youth in disadvantaged schools, university expectations and participation are often limited by access to social and cultural capital that support expectations. This study investigated the utility of creative arts outreach initiatives (CAI) in supporting students' university expectations and building cultural capital in homes, schools and neighbourhoods in the southwest corridor of Perth, Western Australia. Cultural capital was operationalised as discussions about university with parents, teachers and friends as important socialisers. The CAI provided task-based programs that connected students with industry professionals and university academics to access new social and cultural capital, develop skills that satisfied learning objectives and increase navigational capacity for higher education participation. Multi-group latent growth models were estimated for university expectations across 3 time points and university discussions with important socialisers at time 3 using a propensity-score matched sample comprising 176 students aged between 11 to 18 years from eight high schools (program group = 88, control group = 88, females = 64%). Results indicated stability in levels of university expectations for program participants and increased discussions about university with parents, teachers and friends. Findings support the inclusion of people-rich, co-curricular creative arts programs such as CAI in disadvantaged schools to build social and cultural capital that supports and potentially widens higher education participation in this region.

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University; capital; widening; outreach

Context

In today's global economies, higher education participation significantly influences a young person's future workforce participation, income and career prospects and social and economic mobility. College graduate earnings in the US are 64% higher than for school leavers (McFarland et al., 2017), in Australia, the differential is 72% (OECD, 2017), with UK stable at 35% (Weale & Adams, 2016). In Australia, only 18% of undergraduate population are from low socio-economics status (LSES) areas (Koshy, 2016) compared with the UK at 22% (University and Colleges Admissions Service, 2016), and

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the US at 63% of two and four year college entrants (McFarland et al., 2017). Many LSES young people have limited access to the social or cultural resources to engage with higher education and employment (Nikunen, 2017), therefore providing access to these resources is important in tackling underrepresentation of low SES students in university participation. For this group, educational exclusion would be less about ability (Scull & Cuthill, 2010) and more about diminished capacity to navigate towards higher education access and opportunity to engage with higher education structures that leads to an unequal distribution of the benefits of education in adulthood (Gale, 2015). Previous research has provided little information on how disadvantaged youth who hold university expectations might build and maintain discussions about university with proximal socialisers. Therefore, how participation in outreach programs might support expectations and influence students' discussions about higher education plans with parents, teachers and friends needed further investigation.

To redress the inequality in access and higher education engagement for low SES students in the southwest corridor of metropolitan Perth, Western Australia (WA), the Federal Government partnered with Murdoch University in the Murdoch Aspirations and Pathways for University (MAP4U) project. It focused on building aspirations, increasing access and opportunity, and widening university participation through collaborations with industry, universities and high schools in the Kwinana, Rockingham, and the Peel precincts, as recognised areas of social disadvantage (Vinson, Rawsthorne, Beavis, & Ericson, 2015). The MAP4U project shared the mandate of other Australian *widening participation* initiatives to increase university participation through the accumulation of information about university processes and knowledge that builds 'confidence, certainty and a sense of entitlement' (Reay, 1998, p. 522). However, it differed from these initiatives in that the Creative Arts Initiative (CAI), within the MAP4U project, was designed for and ran within high schools as task-based activities that satisfied curriculum objectives, developed skills and brought together mentors from industry and universities to build capital, capacity and capabilities. A key innovation in the CAI programs was to embed industry and university-linked mentors within schools as program facilitators over multiple school terms (for some programs). In this environment, we predicted that students would receive support and informal mentoring, widen their social networks and develop ongoing dialogues about school and post-school study options. This study focuses on the discussions, specifically with parents, teachers and friends.

Aspirations and expectation for university education

Forming educational aspirations and expectations for the future are important developmental tasks for adolescents (Beal & Crockett, 2010). Early aspirations are borne out of vague, idealistic and hopeful representations of an imagined future (Hegna, 2014; Smith, 2011) and often based on childhood interests and desires with little reference to ability or capacity (Nurmi, 2004). As young people develop and begin their transition into adulthood, aspirations for their future may change to become more articulated expectations after evaluating current interests, abilities and values (Gottfredson, 1981). For many, these realistic expectations inform present and future goal-directed behaviours (Beal & Crockett, 2010). University expectations are strongly shaped by societal norms of the school, neighbourhood and importantly, the home (Reay, 1998). Young people in

low SES areas have high aspirations for educational and work careers (Archer & Yamashita, 2003; Gore et al., 2017) but are much less likely to realise these aspirations than their high SES peers (Bradley, Noonan, Nugent, & Scales, 2008). Archer and Yamashita (2003) summarize Beck's 1992 description of the lives of low SES youth as 'bounded by risk, inequalities and uncertainties' arguing that their decisions and choices for higher education come from different patterns of access than those of advantaged youth (p. 57). Additionally, post-school choices are often limited by structural inequalities that, in turn, limit available transition options (Ball, Macrae, & Maguire, 2000). One possible link between a young person having the viable educational choices and the capacity to realise them is the possession and ongoing accumulation of social and cultural capital from their proximal environment that helps them to navigate the education systems (Kintrea, St Clair, & Houston, 2015). Therefore, the capacity for young people to imagine, develop and make realistic university choices is established and informed by their interactions with influential socialisers and their social networks.

Accumulating capital for university participation

A useful theoretical framework to situate the contexts in which young people may accumulate capital is Bronfenbrenner's (1979) ecological systems theory. This theory positions parents, teachers and friends in the microsystem operating as important socialisers (Bronfenbrenner, 1979, 1986) who most directly influence the individual's accumulation and mobilisation of social and cultural capital, particularly for educational development (Stanton-Salazar, 2011).

Social capital has been defined as the interplay between actors and available resources (Cumming-Potvin & MacCallum, 2010) that a person may access within their proximal environment and mobilise as required (Bourdieu, 1986). Family, school and neighbourhood provide linkages to other people – parents' networks, school support networks, non-related adult mentors, friends and peers – who can access resources that build opportunities, shaping the development of young people's viable expectations for higher education (Crosnoe, Cavanagh, & Elder, 2003). Information, norms and support are key resources that can be accumulated through the networks found in the microsystem (Bourdieu, 1986; Coleman, 1988). Young people with high levels of social support and capital (more networks with resources) within and between these environments often have more positive developmental and educational trajectories than those who have less positive and less functional relationships with these socialisers (Butler & Muir, 2017; Crosnoe, 2004). Therefore, building social networks, through school, with knowledge about university may help youth to traverse the pathways towards university participation.

Lareau (2015) suggests that cultural capital is knowing the accepted norms, learning the skills to negotiate access to a particular culture (e.g., the academic culture of universities) and young people having the capacity to draw on prior knowledge and experiences (own or socialisers') as they navigate towards adulthood. Parents have been considered the primary source of cultural capital linked with children's educational careers (De Graaf, De Graaf, & Kraaykamp, 2000). However, valuable sources of cultural capital also exist in teachers at school, and friends in the neighbourhood (Teachman, Paasch, & Carver, 1996). When educational aspirations are supported and 'collectively felt' between the

socialiser and the child (Reay, 1998, p. 526), this may allow for the reinforcement and development of viable expectations for the post-school educational transition.

Outreach programs such as the CAI were developed to facilitate access to new resources in the family, school and neighbourhood to build networks of previously inaccessible people. Through these resources, which provide informational, emotional and instrumental support (House, 1981; Rezai, Crul, Severiens, & Keskiner, 2015), young people may acquire capital to validate their university expectations and build more positive relationships with their proximal socialisers. Through CAI, external mentors were introduced as a knowledge and information resource for higher education pathways. CAI offered unique experiences with these mentors that could be shared with socialisers to further develop instrumental relationships. Processes that involve face-to-face interactions between socialisers and the developing child play an important role in the achievement of positive educational outcomes (Bogenschneider, 1997). An Australian study found that discussions about university with parents were positively associated with both university aspirations and university expectation, particularly for low SES students (Watson, Vernon, Seddon, Andrews, & Wang, 2016). However, for disadvantaged youth, the instrumental role of parents in their child's navigation towards higher education participation may be limited (Ceja, 2006) and parents may lack 'transgenerational scripts' (Ball, Davies, David, & Reay, 2002, p. 57) about higher education. The CAI programs were designed to develop processes through activities to shape these scripts and increase discussions about university with socialisers who have few university experiences or knowledge in traversing those pathways.

The creative arts initiative

Outreach programs within schools can be a prime source of social and cultural capital as they facilitate access to bridging networks between institutional agents, students, teachers, parents and peers/friends with opportunities for interactions to take place between these people (Phillips, 2010). By extending young people's and their socialisers' networks, they might accumulate knowledge about university pathways and the processes involved for university participation. This knowledge can then be shared amongst the students, their friends and peers, parents and teachers. The programs also sought to increase the students' navigational capacity with guidance and support from the institutional agents as they developed and formulated their higher education plans.

The creative arts initiative design

The CAI comprised four unique task-based, co-curricular activity programs including film making, digital media (photography, digital sound production), games art design, and theatre workshops. These programs connected high school creative arts students with industry professionals and undergraduate arts students. Hands-on activities were offered in schools and at universities using state-of-the-art technologies with professional mentors who provided context-specific competencies and experiences that linked to industry-specific skills. With tutelage, students were able to develop skills with supportive adults, and it was expected that students could evaluate their existing aspirations and expectation for university participation.

The current study

The aim of the study was to examine the influence of creative arts outreach programs on university expectation for students in low SES schools, and how these expectations change over time for participants. The programs were considered the mechanism by which students could accumulate both social capital, through the networks they accessed, and cultural capital, through the discussions about higher education with parents, teachers and friends. We tested the following hypotheses:

1: Students participating in the Creative Arts programs would show an upward trajectory of university expectation compared to the control group.

2: University expectation would positively predict ongoing discussions with parents, teachers and friends for program participants compared to the students in the control group.

Method

Participants

The sample comprised 176 high school students (64% female; 75% in year 7–10; 25% in year 11 and 12) from five government and three non-government schools (mean ICSEA of 955, $SD = 52$). The ICSEA is a standardised index that describes a school's comparative socio-economic advantage based on parental education, occupation, income, ethnicity, and geographical location of students (ACARA, 2017). The index has a mean of 1000 and a standard deviation of 100. Seventy-nine per cent of participants identified themselves as Australian, 5% as Aboriginal, 6% as Asian, 5% as other, and 5% not responding to this question. Forty-one per cent of students indicated they would be first in family to attend university (4% not sure). Ninety-four per cent of the program group participated in only one program per year.

Procedure

Ethics approvals were obtained from Murdoch University, WA Departments of Education and Catholic Education. Schools responded to an invitation to participate in the MAP4U research during 2014 and 2015. Participation required signed informed consent from each school, student and legal parent/guardian. Satisfying confidentiality and withdrawal disclosures, students completed a survey across three, 30-minute sessions, at six-monthly intervals using *Survey Monkey* on iPads. For each measurement occasion, students reported their levels of expectations to go to university and the frequency of university discussions with parents, teachers and friends at the third measurement occasion (see Figure 1).

Measures

The items used in this study were derived from MTAS (Watson et al., 2016) and The Australian Survey of Students Aspirations (TASSA) (Parker, Stratton, Gale, Rodd, & Sealey, 2013) instruments. The propensity-score matching items included: gender; students' first in family status; year level; three items measuring school behaviour (e.g., 'how many times in the last 6 months have you: skipped school without your parents/carers/

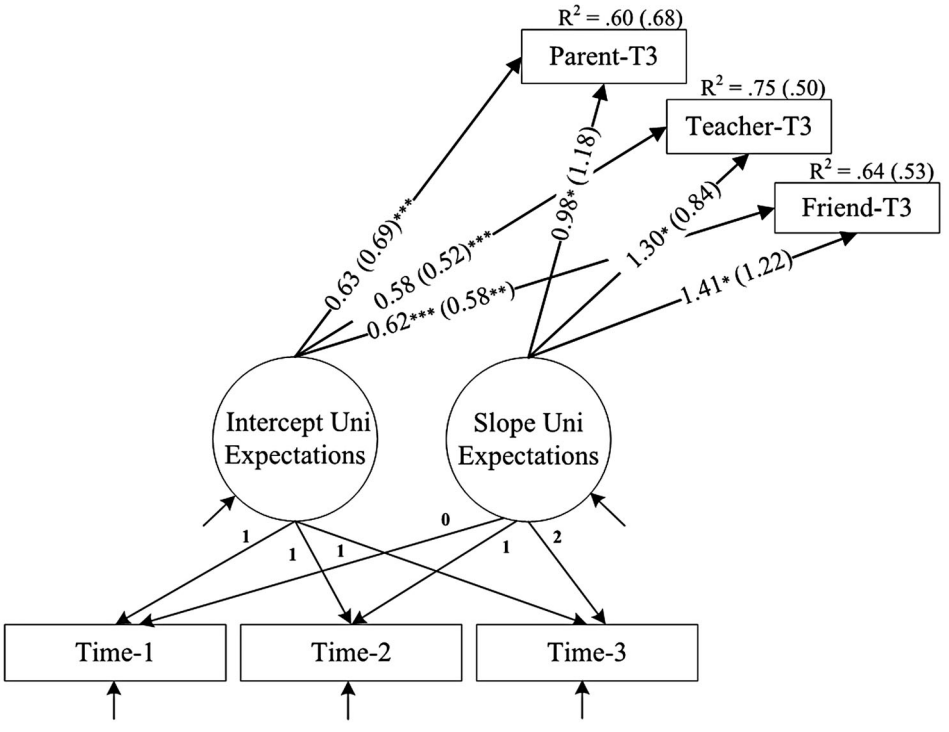

Figure 1. Path diagram for latent growth curve model with intercept and slope of university expectations predicting university discussions with unstandardised estimates for CAI participants (non-participants in parenthesis).

guardian's permission'); and three items measuring academic self-concept (e.g., 'If I work really hard, I can be one of the best students in this school'). The matching process creates an initial balance between the CAI group and the control group on covariates related to students' backgrounds and their approach to school in terms of behaviour and engagement. Therefore, these pre-test covariates cannot be confounders to bias the effects of the CAI program (Thoemmes, 2012).

University expectation

A latent growth curve model of university expectations comprised the intercept and slope (see Figure 1) derived from responses to one item 'how likely is it that you will go on to university after high school?' on a 7-point scale from 1 *(Not at all likely*) to 7 (*Very likely*) over three time points.

University discussions with parents, teachers and friends

Student's cultural capital was operationalised as the reported frequency of discussions about university with parents, teachers and friends at the third data collection. To report on parent discussions about university, students rated one item, 'how often do you talk about university with your parents/guardians/carers?'. For discussions with teachers, students rated 'how often do you talk about university with your teacher/career counsellor?' For discussions with peers, students rated 'how often do you talk about

university with your friends?'. These three items were rated on a 5-point Likert scale from 1 (*Never)* to 5 (*Often),* with 5 indicating more frequent discussions with the socialiser.

The scope of creative arts initiative

Program participation ranged from one week to four months. Outputs were assessed for curriculum and portfolio entry requirements as a university pathway. The four programs offered follows.

Screen and sound production

A free program available to all students that involved casting, acting and technical sessions that culminated in a three-day film shoot. The films were screened at Murdoch University Open Day. Follow-up activities included information sessions relating to university entry and creative arts courses and industry workshops. The students gained access to approximately 20–25 Australian film industry professionals and 15–20 university creative arts students over four months from March to June each year, from 2014 to 2016.

Media frenzy

This five-day on-campus program cost $50 which gave senior students (years 10 to 12) the opportunity to experience university life and explore creative and digital arts facilities during their July (winter break) holidays. Students attended workshops presented by active industry professionals who teach and work in journalism, public relations, radio, games and sound production industries.

Games art and design

A free school-based program involving co-curricular activities for year 10 to 12 students to explore industry-standard games development techniques and processes. Students created 3D animation, modelling and mobile game applications with industry professionals and university student tutors. Student-teams worked with tutors to produce 'market-ready' products that were showcased at university Open Days and at the schools.

Theatre workshops

This free program involved years 10 and 11 students visiting a professional theatre space at a university campus over three, one-day sessions to explore theatrical performance, production, and design. Workshops offered students opportunities to network with the staff and university students and to volunteer for theatre work experience to gain skills that could be linked to a portfolio pathway.

Analysis plan

Analyses were conducted in three stages. First, we ran a propensity-score matching process (Rosenbaum & Rubin, 1985), a technique to create control (no CAI) and program (participated in CAI programs) groups with very similar characteristics at baseline (time 1). Logistic regression predicted membership in the program group based on the set covariates related to student's background, school behaviour and engagement (Thoemmes, 2012). The overall χ^2 balance test was not significant, χ^2

(16) = 14.92, $p = .53$ indicating that matching improved overall balance (Thoemmes, 2012). The matched samples of 88 program participants and 88 comparable control participants were used for further analyses. Second, we estimated an unconditional latent growth model for university expectations using *Mplus 7.4* (Muthén & Muthén, 2015) to identify strength and direction of change over time. The comparative fit index (CFI; >.90), and the root mean square error approximation (RMSEA; <.05) were used to evaluate the closeness of fit for each model (Yuan & Bentler, 2000). As well as modelling within-person and between-person changes over time, latent growth curves are used to identify and compare differences between sub-groups (Curran, Muthén, & Harford, 1998). Therefore, to test whether the strength of the effects of changes in university expectations over time varied as a function of program participation, a series of multi-group latent growth curve models was then estimated. This method assessed the moderating influence of the two sub-groups, program participation or control. We imposed equality constraints on the intercept and slope growth factors separately and examined the nested differences in χ^2 for model fit as a commonly accepted method for detecting moderating effects in latent growth curve models (Curran et al., 1998). Lastly, using the grouping variable for program participation, we then examined the impact of growth in university expectations for each group on the final level of discussions with parents, teachers and friends. That is, the latent growth curve for university expectations is used to predict the distal outcome measures for discussions about university with parents, teachers and friends.

Results

University expectations were strongly and positively correlated with teacher, parent and friend discussions about university during the last period of observations. Results also indicated that university expectations scores trended toward the high end of the scale across the three time points while the discussions with parents, teachers and friends were mid-range, for further details, see Table 1.

Table 1. Correlations and descriptive statistics for the study variables (Program group, $n = 88$, control group, $n = 88$).

	1	2	3	4	5	6
1. T1 Uni expectation	–	.69**	.46**	.54**	.48**	.42*
2. T2 Uni expectation	.63**	–	.67**	.52**	.68**	.67**
3. T3 Uni expectation	.59**	.69**	–	.65**	.69**	.60**
4. T3 Uni discussions with parent/s	.55**	.53*	.70**	–	.76**	.46**
5. T3 Uni discussions with teacher/s	.46**	.50*	.58**	.52**	–	.60**
6. T3 Uni discussions with friends	.42**	.67**	.59**	.58**	.54**	–
CAI Program group						
Mean	4.98	4.80	4.59	2.95	2.92	3.32
SD	1.68	1.82	1.99	1.29	1.19	1.40
Control Group						
Mean	5.13	4.66	4.58	3.16	2.63	3.05
SD	1.57	1.75	1.99	1.30	1.15	1.38
Item Range	1–7	1–7	1–7	1–5	1–5	1–5

Notes: Program group correlation values shown above the diagonal. T = data collection time point. Uni = University. Control group = not participating in CAI program.
*$p < .05$, **$p < .01$.

University expectation trajectories

Overall the baseline latent growth model for students' university expectations fit the data well, χ^2 (1) = 0.065, $p > .05$, $N = 176$, CFI = 1.000, RMSEA = 0.000. A significant negative mean for the slope factor ($\mu = -.25$, $p < .05$) indicated that overall students reported decreases in their university expectation over time. A significant variance component for the intercept ($\psi = 2.06$ $p < .05$) indicated that there were significant individual differences in the initial levels of university expectation. There was marginal variance around the slope ($\psi = 0.38$ $p = .06$) indicating some individual differences in the change in university expectation over time. The intercept and slope were not significantly correlated.

The baseline model was re-estimated as a multi-group model for program participation (participant = 1, non-participant = 0). The fully estimated multi-group latent growth model fit the data well, χ^2 (8) = 8.63, $p > .05$, $N = 176$, CFI = .998, RMSEA = 0.030 and the proposed model was accepted.

Equality constraints were imposed hierarchically to probe the interaction between program participation and university expectation. Nested χ^2 tests were used to test the adequacy of the constraints (Bollen, 1989). Firstly, we re-estimated the model with the intercept invariant. The moderation test revealed that students' initial university expectations did not differ between program and control groups ($\Delta\chi^2_{(1)} = 0.355$, $p > .05$). This was to be expected as the creative arts intervention occurred after the baseline measurement. There was a significant decline in university expectations over time for the control group ($B = -0.298$, 95% CI = −0.489, −0.117) but there was a non-significant decline in university expectations for the program group ($B = -0.194$, 95% CI = −0.432, 0.025). This non-significant decline suggests a maintenance of university expectations over time for those who participated in creative arts programs.

Discussing university with parents, teachers and friends

The stable slope for university expectations for students who participated in the creative arts programs was found to positively predict ongoing discussions about going to university with parents, teachers and friends compared to the control group as shown in Figure 1. These results indicate that, for students who undertook creative arts programs, expectations to go to university were maintained over time and the programs supported increased discussions about university with parents, teachers and friends compared to the control group.

Discussion

Students' expectations for higher education participation have been thought to develop through socialisation processes in the home, school and the neighbourhood. The study sought to examine the relations between students' university expectations and the development and maintenance of discussions about university with parents, teachers and friends after participating in outreach programs that were designed to facilitate students' access to people and information about pathways to university study.

Our first hypothesis stated that students participating in the Creative Arts programs would show an upward trajectory of university expectation compared to the control

group. This hypothesis was partially supported. There was a continued decline in university expectations from time one (early in 2014) to time three (early in 2015), consistent with prior Australian and Norwegian research that reported that higher education aspirations and expectations decline over time for young people into late adolescence (Fleming & Grace, 2014; Geagea, MacCallum, Vernon, & Barber, 2017; Hegna, 2014). Importantly, university expectation for program participants over time was more stable than for non-participants. This finding suggests that offering interventions, such as the MAP4U creative arts programs, in low SES schools can provide students with reliable information and useful knowledge about university courses in their field of interest to support their university expectations. One interpretation is that CAI programs increased participants' social and cultural resources and may have assisted them in evaluating their expectation of university participation more confidently and optimistically. While it appears that the programs facilitated access to new networks of institutional agents in the students' proximal environments, further research is needed to explore how participants accumulated these resources and mobilised them into capital (Bassani, 2007). For the control group, a decline in expectations for university study was observed which indicated a 'cool out' of expectations (Alexander, Bozick, & Entwisle, 2008, p. 391) often due to a lack of support for these expectations by existing social networks that lack access to the kinds of resources offered in the CAI programs.

The second hypothesis whereby university expectation would positively predict ongoing discussions with parents, teachers and friends for students participating in the creative art programs compared to the control group was supported. Prior research indicates that a positive relationship with parents, teachers and friends is linked with healthy and adaptive social emotional behaviours and development (Wentzel, 1996). The CAI programs provide a 'coat hanger' on which students can 'hang' or structure discussions with significant socialisers such as parents, teachers and their friends about their desires and opportunities for their future.

Parents – increased resource of social and cultural capital

The study found that discussions about university with parents significantly increased for students who participated in the CAI programs. This aligns with previous studies that also reported parent–child interactions (talking, engagement), investment of time/energy and education focus were positively linked with university aspirations, expectations and plans (Watson et al., 2016). Crosnoe (2004) noted that strong, emotionally supportive parent–child relationships permit effective transmission of information and established norms (behaviour, attitudes and expectations), that may generate social and cultural capital. This capital is likely to help young people to effectively navigate new experiences more confidently and play an important role in supporting the child's educational aspirations regardless of socio-economic status and compensate for previously limited instrumental support resources (Archer & Yamashita, 2003; Ceja, 2006). Some youth, often in low education households, inherit a deleterious 'transgenerational script' from parents about their own negative experiences with education systems which most often negatively influences young people's attitudes to post-school study (Eccles & Harold, 1993). The CAI outreach intervention explicitly linked microsystem agents to higher education structures (in the exosystem) and intentionally provided students, parents and schools with additional

network resources, current information and knowledge on how to positively navigate post-school education pathways. The programs encouraged participants to seek and engage in discussions with parents about university, which may generate social and cultural capital at home.

Teachers – increased resource of social and cultural capital

A significant finding in this study was that program participants significantly increased university discussions with teachers over time compared to non-participants. During the programs, teachers were encouraged to play a significant role in the activities and post-program interactions with students and university personnel. A strong aspirational climate at school that promotes student's expectations for post-high school education and increased discussions with supportive teachers are two important factors in student's educational outcomes (Archer & Yamashita, 2003; Ceja, 2006). Thus, our findings suggest that teachers, acting as institutional agents (Stanton-Salazar, 1997), provided access to social, human and economic resources, which were likely to increase students' higher education opportunities and options. In addition, as 'cultural guides', it is likely that teachers were able to provide the decoded knowledge of the (academic) rules, that is, cultural capital (Lareau, 2015, p. 3) as students began to firm up their expectations for university participation. Teachers are important and informed sources of knowledge about higher education given their own recent experiences and 'first-hand narrative' on navigating the pathways and decoding the 'uni language' (Smith, 2011, p. 173). Therefore, supportive teachers at school, and in these CAI programs, help students to build stronger, more positive ties with school, and can increase school satisfaction (Geagea et al., 2017), particularly for low SES students. Teachers who undertake an advocacy role, can often streamline processes and generate social resources that may aid students' development and behaviour toward educational achievement and ongoing expectations (Flaxman, 1992; Uwah, McMahon, & Furlow, 2008).

Friends – increased resource of social and cultural capital

Participants reported increased discussions about university with friends. Peers as socialisers bring an array of attitudes, beliefs, information and behavioural norms (social and cultural capital) to friendship networks that may help or hinder the decision-making process that a young person undertakes about their academic lives. Peers can also offer significant amounts of emotional and social support and exert pressure to follow the prevailing norms and dominant values of the social group in regards to educational performance and aspirations (Laming, 2012). For low SES students, the risk of being alienated from the group can outweigh the value of higher educational attainment and negatively affect higher education aspirations (Social Exclusion Task Force, 2008). As they explore higher education options, non-aspiring friends can negatively influence decisions by bringing pressure to bear on the aspirant's social group membership. Conversely, friends who participate in similar activities and programs, both in and out of school, and have similar aspirations, are likely to develop lasting connections that may positively influence each other's academic achievement and post-school educational transitions (Steinberg, Brown, & Dornbusch, 1997). The study supports the premise that peers and

friends can influence school achievement and aspirations (Epstein, 1983). For example, Asian students select friends based on similar grades, educational aspirations and values while Latino and African American students do not select friends on this basis (Steinberg et al., 1997). Students who participated in the CAI programs together established a network of peers with whom they were able to continue discussions about future university desires and expectations.

Limitations and future research

These findings should be interpreted with caution. The analyses may have been biased from non-participation, non-response or attrition of the sampling and data collection procedures. Further, the sample used was relatively small (176 data points) for a quantitative study and had a large female group. This may have positively skewed results for higher education expectations and higher education discussions as gender effects for females have been well documented in the widening participation literature (e.g., Fleming & Grace, 2014; Hegna, 2014; Laming, 2012). As this research focused on creative arts, findings cannot be generalised to other curriculum areas, such as STEM. Future research may investigate the utility of STEM outreach initiatives in supporting students' higher education aspirations. Finally, the program participants were creative arts students who may have self-selected or were opportunistically selected to participate in the programs and data collections. Future studies that explore students' experiences in the CAI programs might unpack how the processes and acquired resources facilitated participants' reported university expectations and discussion with parents, teachers and friends.

Conclusion

The findings of this study offer empirical evidence that the CAI outreach programs facilitated maintenance of university expectations for participants and a predicted increase in interactions and discussions with influential socialisers as a result of the additional social and cultural capital accumulated by young people in the program. This study demonstrates the potential for a 'people-rich' approach to outreach program design for increasing higher education participation for students in low SES schools. The design of the CAI programs set out to broaden and build resources, and offer bridging networks between the microsystem and higher education structures that positively interact to support young people's university expectations and maintain ongoing family, school and friend discussions about university. CAI targeted non-ATAR creative arts students as a co-curricular option that could directly link to a university pathway and as an alternative to VET, often being the only other option at low SES schools in this region.

The CAI programs developed and generated social and cultural capital that informed and shaped participants' educational expectations and increased family, school and friends' discussions about university as students made plans for post-high school transitions. The programs brought together university students, academics, industry artists and teachers to build high school students' capabilities. The social networks surrounding the school students provided access to information and opportunities for students to engage with higher education structures (the exosystem) in regular and sustained interactions that contributed to students developing stronger and more adaptive navigational

capacities towards higher education (Gale, 2015). These combined factors work together within the CAI outreach programs to build supportive networks and resources (social capital) to increase knowledge shared in discussions about university in the home, in the classroom and in the neighbourhood that generates cultural capital in the proximal environments where young people are socialised.

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