Beyond the realm of cash: street performers and payments in the online world

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Abstract
Street performers are able to contribute to a fabric of a city’s creative dynamic. The exchange for money between a street performer and an audience is a changing landscape. As less cash is carried on people’s person and audiences want to participate in exchange, the industry is ripe for disruption. The paper uses a unique data set from the online busking platform ‘The Busking Project’ to analyse individual donations to 3757 active buskers. Using a Heckman selection model, we find that the number of fans does influence the number of donations and the artist’s genre matters for the likelihood of receiving donation and the amount received. Musicians are more likely to receive a donation; however, it is a smaller donation amount than other performers. The method of payment for receiving a donation and the anonymity of the donor also influences the amount received. The geographic location matters for receiving a donation but not the amount received.

Keywords Busking · Digitisation · Social media · Platform economy · Heckman selection

JEL Classification Z11 · O35 · C24

1 Introduction

Street performers have been performing in public for coin as a centuries old practice (Watt, 2019). In the twenty-first century as less and less coins are carried, buskers are having to rethink the nature of exchange between the performers and the audience through the mobilisation of digital payments. In recent times, busking has shifted from a transient practice and is increasingly seen as a viable career option for
musicians and performers willing to travel with their craft (Ho & Au, 2018; Kaul, 2019; Watt, 2020). We explore how buskers are transitioning away from the use of cash as a form of an exchange towards generating income on digital platforms.

This paper makes a distinct and unique contribution to the cultural crowdfunding literature see (Åstebro, 2017; Chan et al. 2018; Mendes-Da-Silva et al., 2016; Mollick, 2014; Regner, 2021) by focusing on street performers who often exist on the cultural fringes and are rarely explored in the creative and cultural industry (CCI) area of research. The study examines the factors that influence the likelihood of digital payments to increase their online earnings and create more sustainable careers. The research investigates the artist’s genre (musician, circus performer, theatre performer, or unclassified artist), online platform characteristics, regions, and the digital payments methods being used for income creation. By exploiting a unique dataset of street performers seeking online donations (or tips as they are known in busking), we can predict the characteristics of performers who have a higher probability of receiving donations and further predict the characteristics of those more likely to attract higher donations.

There are two significant reasons for the change which is professionalising busking as a legitimate creative occupation. Firstly, it is widely acknowledged that street performers can increase the vitality of space in some regions (Bennett & Rogers, 2014; Doughty & Lagerqvist, 2016; Simpson, 2011). Secondly, the shrinking markets for musicians and performers with the rise of streaming services with small amounts of income derived from those sources due to licencing agreements has reduced access to income from cultural consumers has forced musicians to find entrepreneurial ways to secure creative income (Peukert, 2019). Street performance offers a commercial performance opportunity for emerging and established artists; it can be good for business and cultural creation in the role it serves as a testing ground for the arts industry (Ho & Au, 2018; Leslie & Rantisi, 2011). A clear example of this is the internationally renowned circus production company of Cirque du Soleil that emerged from the street performers in Quebec (Leslie & Rantisi, 2011).

For creative industries, using digital platforms as a method to create income is becoming the new normal. (Regner, 2021; Tosatto et al., 2019). As the digital age emerges, consumers are carrying less cash and opting digital transactions as their preferred option and the technology is now available to facilitate these types of transactions. The impact of COVID-19 has changed our relationship to cash with many consumers and producers preferring to deal with contactless transactions (Auer et al, 2020) and artists are looking to alternate ways to fund their livelihoods (Sheluchin, 2020). Furthermore, the rise of platforms as a means and mechanism in the creative industry are privately generated platform-based ‘ecosystems’, companies which fundamentally ‘are not delivering technology to their customers and clients—they use technology to deliver labour to them’ (Lin & Phillips, 2017). Platform operators act as producers, consumers, and financial backers; these platforms see themselves as instruments of ‘liberation’ and ‘value-sharing’ (Matthews & Rouzé, 2019).

The Busking Project has developed a platform community that engages with street performers to build a profile to connect the performers with their fans online. The platform seeks donations for the artists via a payment app that allows for audiences to link up their credit or debit cards to send remote donations to street performers.
As the founder, Nick Broad nominates in the site’s social mission statement “What we are trying to do is show that being a street performer is a legitimate and accessible way of earning a living. We wanted to devise a form of payment and help them with social networking”. The platform is a method to create income is driven by financial disruption with technology that is now available to facilitate these types of payments. The COVID-19 pandemic has accelerated the move away from cash and coins, to a safer method of exchange, and we account for this in our study. Whether these changes are transitory or permanent remains to be seen. The Busk.co site is one of many methods able to generate cashless donations for street performers via credit card, PayPal, Apple Pay, and Android Pay, NCP, and Stripe. There are other accounts and ways a street performer can engage in cashless donations.

We use data from the online busking platform ‘The Busking Project’ (https://busk.co/buskers) on 3,757 buskers in 121 countries from 26 November 2015 to 31 August 2020. The site provides online profiles, fan support, album sales, gigs, and donations for each artist. We use a Heckman selection model to predict the probability of the busker receiving a donation and the probability of receiving a larger amount of donation in the second step of donations. We analyse the online tips buskers receive exploring key issues such as how the geographic location (region), artist type, methods of payment, when the artist joined the platforms, and opportunities to follow-up and metrics around engagement of the platform. Specifically, we consider what type of street performers who engage with the busking platform is more likely to receive a donation and which characteristics generate higher dollar amounts of donations. This research finds that the number of fans (likes) on the artist’s page generates a greater number of donations on the online platform, additionally musicians and clowns and circus performers are more likely to attract online donations than other types of artists.

The remainder of this paper is structured as follows. In the next section, we review the literature and present our hypotheses. Section two describes our data and section three our modelling framework. We then discuss our findings in section four. Section five presents our conclusions.

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1 See quote from Busk.Co website on the social mission of The Busking Project” https://busk.co/blog/our-journey/busking-projects-social-mission/.

2 In the USA, there are a number of digital apps: processing unit called “DipJar” that works via price fixing for all tips have a set value before the performance, so dips are the value set, “Square” a credit card reader, and “VENMO” which is a social payment application. There are conventional payments methods such as “PayPal” that street performers can use and less convention methods such as “Bitcoin” (see busk.co website).

3 The platform provides advice, advocacy, and access to technology and resources as well as a hiring platform and a database of festivals around the globe.
2 The street performer as an artist

2.1 Precarity of artists careers

Within the creative industries, there is an increasing awareness of the precarious employment associated with artists. The artist is subject to uncertain and unstable career path. Employment can come in a number of different career trajectories often referred to as portfolio careers (Bridgstock, 2005). The career trajectory of an artist is patchwork in nature without a clear or formulated well-trodden path; work is a patchwork of grant based that is publicly subsidised and/or commercial projects, jobs, and educational experiences. The uniqueness with the craft of street performance is for artists to build their skill portfolio further by directly engaging with the audience, which does place more responsibility on the artist to actively engage and seek out fans and an audience directly (Harrison-Pepper, 1990; Ho & Au, 2018; Ho et al., 2020). For this reason, we are interested in the feedback loop available for the artist to engage with fans; we know whether a donor left an email address to keep in contact for further engagement.

There is a conflict between art and business with a large number of artists are self-employed and managing their own labour. This is self-evident in the street performers career. The creative/cultural entrepreneurship is a necessary part of being a contemporary artist (Eikhof & Haunschild, 2006; Ellmeier, 2003; Leadbeater & Oakley, 1999). In part, they are an artist and the other part they are an entrepreneurial firm what Menger (1999) nominates as small firm. The role of fans in sustaining cultural entrepreneurship through engagement in social media is not always clear; there is evidence of transformative participation but also an exploitation of fans (see Galuszka & Brzozowska, 2016; Morris, 2013; Scott, 2015). Morris (2013) contends the increasing integration of social media in arts and the rise of digitalisation has increased the active participation of fans in cultural entrepreneurship; in some part this is akin to co-creation to increase circulation of cultural goods.

Artists are influenced by both intrinsic and extrinsic motivations. Although artists do need to find ways to derive an income. There are obvious psychic benefits that motivate the performer to pursue a career despite the employment insecurity and uncertainty of income (see Baumol & Throsby, 2012). Artists often have intrinsic motivation to perform (Csikszentmihalyi, 1975; Frey, 1994), and that drives artists to pursue a creative career despite the likely prospect of low pay and employment insecurity. Another explanation focuses on pleasure as a psychic “income” that serves to motivate artists who earn low monetary income. In this case, arts work is included as an argument in the utility function, and the model is often referred to by Throsby (1994) as the work-preference model. Billie et al. (2013) refer to the non-pecuniary benefits of being an artist as to the reason why artist do what they do, which leads to the next question of how the artist can engage with fans to create a working wage in a digital age where the opportunity for artist’s avenues to engage with fans has expanded.

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2.2 Engagement with fans

Busking at its core is the ultimate test of being able to draw and audience to engage in a performance; some research finds similarities to charity and an exchange (Kushner & Brooks, 2000; Lemay & Bates, 2013). For circus performers or circle artists, the art of the trade is knowing how to conclude a performance with a successful ‘hat line’; these artists use range of strategies to elicit higher donations (Harrison-Pepper, 1990). Intriguingly, Zanola (2010) finds demand for ticketed circus performance, as opposed to other forms of ticketed performance, and actually has positive price elasticity. The successful pitch is usually unambiguous for buskers as to their engagement: it is the amount of money in the hat or the size of the audience. Either bandwagon or crowding-out effects can influence the number and the size of the tips. Bandwagon effects occur, when consumers follow the behaviour of others. Consumers may do this because they want to ‘fit in’ and follow what others do. But equally high freeriding or low freeriding will be imitated with some audiences either tipping or not tipping the artist (Kushner & Brooks, 2000). Performers have been performing in public for coin is a centuries old practice, but increasingly society is becoming cashless. Performers have needed to be agile in responding to digital innovations; the introduction of mobile technologies has opened up the opportunity for payments. YouTube, Instagram, and pay-as-you-please have also evolved the musician’s capacity to capture an audience (Peukert, 2019).

For artists to sustain a relationship with their fans in the current climate, there is an increased emphasis on self-marketing through engaging with social media and online platforms. With the rise of digital technologies comes a new wave of ways for the artist to engage with fans (Peukert, 2019). Meiseberg (2014) notes the positive effect of numerous media channels has on the financial rewards for artists in folk music in Germany, particularly those that have won talent contests, but sales between the physical product and digital markets vary depending on the career stage of the artist. Established artists with higher ability benefited from increased revenue from social media engagement.

2.3 Music and the changing face of interaction: crowdfunding

Internet crowdfunding over the past decade has been legitimised by Creative and Cultural industry (CCI) as a way and means to finance projects (Tosatto et al., 2019). Over the last several years, it has replaced the role of music intermediaries (Rouzé, 2019). With musicians file sharing and a move towards the digital format for music have caused an enormous decline in sound recording revenues (Liebowitz, 2016). There are also inadequate licencing deals that limit artists capacity to finance their careers through streaming services such as Spotify (Remneland Wikhamn & Knights, 2016).

Quality of information, location, and duration effects are influencing factors on crowdfunding successes in cultural industries. Several authors find that the artists who communicate their project quality with their audiences through videos, word count
images, and blogs are more likely to generate higher levels of donations on platforms (Agrawal et al., 2015; Åstebro, 2017; Chan and Parhankangas, 2017; Crosetto & Regner, 2018; Mollick, 2014; Regner, 2021). Information quantity is also a determinant in crowdfunding project successes (Crosetto & Regner, 2018; Moy et al., 2018). Moy et al. (2018) reveal a U-shaped relationship with an optimum point for the number of words written on a profile and project success. Other researchers show evidence social media presence, and fan engagement has proved critical for other crowdfunding campaigns targeting music, see for example (Åstebro, 2017; Mendes-Da-Silva et al., 2016; Mollick, 2014). Location effects and cluster effects are also strongly linked with higher levels of donations See (Agrawal et al., 2015; Mollick, 2014; Josefy et al., 2017; Mendes-Da-Silva et al., 2016). This relationship could be driven by altruism at a local level, or family and friends in the location. The duration effect on crowdfunding success reveals mixed results; Mendes-Da-Silva et al (2016) find funding duration to be positive for creative ventures funding success; however, other researchers (Chan et al 2018; Mollick, 2014) reveal a negative duration effect. It should be noted that the Busk.co platform differentiates from other CCI platform in that it acts as a mechanism for tips/donations for performers; there is also potential for fans to tip rather than a funding a one-off project such as Kickstarter or an ongoing monthly relationship such as Patreon.

Building a community of likeminded super fans was a concept initially proposed by Kelly (2008) that for an artist to survive they need 1000 true fans to spend $100 each year on creative output to create a sustainable income. For this reason, we investigate the artist’s social media presence and how extensive their online profile is, alongside their geographical location to determine the influence of these factors on the probability of donation. Artists’ integration with social media marketing is allowing for greater access to for fans to co-create and consume their products. Morris (2013) finds that digitalisation has laid bare that fans are not only paying for the objects, but they are also paying for the meanings associated with the art.

This paper seeks to contribute to the literature around the artist’s career, particularly focusing on street performers and how technology can help further engage fans to generate income. With professional buskers, there is an increased incentive for self-promotion as there is a direct relationship between the performer and the fans through this platform. The research asks does the type of artist attract donations, do more fans mean more money, does a feedback loop through leaving an email result in higher donations? What forms of self-marketing on the platform give rise to additional donations? Which of the elements of self-marketing: number of videos, number of images, number of social media platforms and how much they write in their bio influence the probability or the level of donations? Does the area where the artist registered matter for donations? Is the time they have spent on the platform matter for the level donations?

3 Data and descriptive statistics

Our data relate to 3,757 performers active during the period November 2015–August 2020 on the online platform https://busk.co. For each performer, we have information on what is the major genre of their act (Circus, Theatre, Musician, or ‘Other
genre’), when and where they signed up to the platform (Europe, UK, USA/Canada, or ‘Rest of World’), and details concerning their online profile on the platform. Genres have been grouped together for our analysis; circus performers also include clowns, jugglers, magicians, and freak-show artists. The theatre performers include dancers, magicians, story tellers, puppeteers, and statues. Musicians are a stand-alone category. For a performer who does not receive a donation in the period, our date has one observation that contains their characteristics (genre and location) and of their profile. Profile characteristics include biography length (in characters), number of media (images and videos) present on the profile, the number of URLs listed, and the fans on the platform. We also know how many gigs non-performers have requested of them. For performers who do receive donations, we have repeated observations of these characteristics for each individual donation. Additionally, for performers who receive donations we also know the date, the amount, and the currency of the donation. We convert these donations into US dollars using the

| Table 1 | Descriptive statistics |
|---------|------------------------|
|         | Observations | Mean   | SD     | Minimum | Maximum |
| Biography length | 6,049 | 320.35 | 328.77 | 0       | 3748 |
| Media | 6,049 | 4.39 | 7.07 | 0 | 300 |
| URLs | 6,049 | 2.30 | 1.96 | 0 | 6 |
| Fans | 6,049 | 25.27 | 64.59 | 0 | 256 |
| Albums | 6,049 | 0.07 | 0.35 | 0 | 3 |
| Gigs requested of them | 6,049 | 0.19 | 0.84 | 0 | 15 |
| Joined platform post WHO announcement | 6,049 | 0.26 | 0.44 | 0 | 1 |
| Donation (Y/N) | 6,049 | 0.42 | 0.49 | 0 | 1 |
| Donation amount | 2,555 | 14.03 | 25.49 | 0.65 | 551.00 |
| Card payment | 2,555 | 0.73 | 0.45 | 0 | 1 |
| Anonymous donation | 2,555 | 0.48 | 0.50 | 0 | 1 |
| Anonymous by card | 2,555 | 0.29 | 0.45 | 0 | 1 |

| Table 2 | Descriptive statistics by genre |
|---------|-----------------|-------|-------|---------|------|
|         | Musician | Circus | Theatre | Other genres | Total |
| No donations made | 2450 | 330 | 360 | 354 | 3494 |
| Number of donations made | 1447 | 771 | 142 | 195 | 2555 |
| Total transactions | 3897 | 1101 | 502 | 549 | 6049 |
| Total donation value | 16,667 | 14,443 | 2099 | 2646 | 35,855 |
| Average value for donations given | 11.52 | 18.73 | 14.78 | 13.57 | 14.03 |
| Total number of buskers | 2642 | 364 | 376 | 375 | 3757 |
| Buskers with donations | 192 | 34 | 16 | 21 | 263 |
| Average number for buskers with donations | 7.5 | 22.7 | 8.9 | 9.3 | 9.7 |
| Average value for buskers with donations | 86.81 | 424.81 | 131.16 | 125.99 | 136.33 |
appropriate exchange rate on the date of the donation. We further convert these into real values using the consumer price index for the USA with 2019 = 100. Additionally, for each donation we know the payment method (Card/PayPal or payment app) and whether the donor was anonymous or known (e.g. by leaving an email address). Table 1 contains descriptive statistics from our data.

To gain a deeper understanding, we investigate our data by genre (Table 2) and by location (Table 3). There is considerable variation in the number of performers receiving and the amounts that they received by genre with musicians receiving most donations but with lower average value. There is less variation by region although average donation size appears similar in the UK and USA/Canada.

### 4 Modelling framework

In our model, we have two, potentially related, outcomes whether a performer receives a donation and, if a donation is received, the amount of the donation. We use a sample selectivity model (Heckman, 1976, 1979) comprising of a selectivity component and a regression model. We note that the observations where we observe a donation may be a non-random sample of performers. Performers may be able to increase the chance of receiving a donation and, if so, the amount through their profile, but the donation choice is made by potential donors who visit the platform. Our choice of model is appropriate since in a hurdle model specification the first hurdle (participation) is dominant in determining the non-donation, donation discrete choice (see Madden (2008), Puhani (2000). Moreover, such models have been used before in applications where the first hurdle, the selectivity component for the discrete outcome, is dominant (see, inter alia, Farrell et al 2021; Mendes-Da-Silva et al 2016; Regner, 2021; Suárez-Fernández & Boto-García, 2019).

In our model, the selectivity component concerns the probability of receiving a donation and the regression model is used to explain the donation amount given that a donation is made. In the selectivity component, we assume that underlying the observed data is a latent variable labelled $y^*_i$. We assume that $y^*_i$ is determined by a latent regression model with explanatory variables $\zeta_i$. We only observe the value of

| Table 3 | Descriptive statistics by location |
|---------|-----------------------------------|
|         | USA/Canada | Europe | UK | Rest of World | Total |
| No donations made | 1439 | 798 | 700 | 557 | 3494 |
| Number of donations made | 1226 | 377 | 815 | 137 | 2555 |
| Total transactions | 2665 | 1175 | 1515 | 694 | 6049 |
| Total donation value | 18.605 | 5042 | 10.289 | 1919 | 35.855 |
| Average value for donations given | 15.18 | 13.37 | 12.62 | 14.01 | 14.03 |
| Total number of buskers | 1551 | 850 | 764 | 592 | 3757 |
| Buskers with donations | 112 | 52 | 64 | 35 | 263 |
| Average number for buskers with donations | 10.9 | 7.3 | 12.7 | 3.9 | 9.7 |
| Average value for buskers with donations | 166.12 | 96.96 | 160.76 | 54.83 | 136.33 |
a donation if one is made, and then for the donation amount the second component of our model—a regression equation—will apply. Formally, for each observation \((i = 1, \ldots, n)\) in our data, we have the following:

### 5 Selectivity component:

\[
y^*_i = z_i' \delta + u_{1i}
\]

where

\[
y_i = \begin{cases} 
1, & \text{if } y^*_i > 0 \\
0, & \text{otherwise.}
\end{cases}
\]

Equivalently,

\[
y_i = \begin{cases} 
1, & \text{if a donation is made} \\
0, & \text{otherwise.}
\end{cases}
\]

This component yields a binary choice model for a donation being made.

### 6 Regression component:

\[
d_i = x_i' \beta + u_{2i} \text{ if } y^*_i = z_i' \delta + u_{1i} > 0
\]

Equivalently,

\[
d_i = x_i' \beta + u_{2i} \text{ if } y_i = 1.
\]

This model allows for the estimated parameters in the regression component to be corrected for any possible bias caused by the non-randomness of donations being made, relative to where donations are not made. Completing the model specification, the vector of stochastic variables \((u_{1i}, u_{2i})\) is assumed to follow a bivariate normal distribution \([0, 0, 1\sigma^2, \rho]\). Thus, the selectivity and regression components may be correlated \((\rho \neq 0)\) and a lack of correlation implies no selectivity bias. In our empirical modelling, the sample selectivity model therefore combines a Probit model for donation with a regression model for the donation amount.

Specifying this model can be difficult. For example, many of the variables that might help to determine the donation amount may also determine whether a donation is made or not. Our selection of variables to enter each component of the model is guided by the literature discussed above. Turning first to the selection equation for an observed donation (yes/no), the probability of observing a donation will depend upon the characteristics of the performer (type of performer), on their location, and the information contained on their online profile. The literature suggests that the time that a performer has been signed up to the platform may also influence the probability of receiving a donation. Rather than using this variable, we choose to use an indicator variable whether the performer joined the platform post the WHO
pandemic announcement on 11 March 2020.\textsuperscript{4} Our data contain a mixture of both indicator variables (genre and location) and continuous variables concerning the online profile. Previous research has shown that the relationship with such variables is nonlinear (Chan et al., 2018; Moy et al., 2018). Thus, to allow for potential diminishing returns to biography length and the media present (images and videos) we utilise the inverse hyperbolic sine transformation \(\ln\left(x + \sqrt{x^2 + 1}\right)\). This transformation allows us to include zero observations in our model but has the same interpretation of coefficients as a logarithmic transformation (Burbidge et al., 1988; MacKinnon & Magee, 1990).

The variables in the regression equation for the donation amount (the \(x\) variables) concern factors that influence the level of the donation made. Again, the same variables may influence the donation amount. Moreover, information on the donor will also influence the donation. While we only have a limited information on the donor, we do know the payment method and whether the donation is anonymous. We include both of these, but with an interaction term to investigate whether payment method leads to different donations according to whether the donor is anonymous or known. Our specification of the model above leads to a model that is identified, not through the nonlinearity of the model, but through different variables entering the two components of the model.

7 Results and discussion

We estimate the Heckman selectivity model by maximum likelihood. Table 4 contains the estimation results and robust standard errors. We observe 2,555 donations (42.2\% of total observations). Our model has a good overall fit to the data as measured by the overall Wald test and successfully classifies 93.5\% of observations as donations or not. There is some evidence of sample selectivity, and thus, the use of the Heckman model is supported.

Turning first to the selection component of the model, we see that there are significant genre and location effects with circus performers and magicians having higher probability of receiving donations than other artists and those located in the UK or USA/Canada having higher donation probabilities. Performers who joined the platform after the WHO announcement have a significantly higher probability of receiving donations. Popularity through fans or gigs requested of the performer both increase the probability of a donation. Of the other aspects of the profile, social media connectivity (more URLs listed) and the use of media do not significantly influence the probability of receiving a donation, but listing of albums and increased information in the biography both increase the donation probability. Consistent with Moy et al. (2018), we find this relationship to be nonlinear. The regression equation for the donation amount shows a genre impact—musicians receive smaller

\textsuperscript{4} Initial descriptive analysis showed a large influx of performers to the platform post the WHO announcement.
Table 4  Determinants of donations

| Variable | Donation [Y/N] | Donation in USD19 |
|----------|---------------|------------------|
|          | Coefficient   | SE               | Coefficient   | SE               |
| **Genre [Base = Other Genres]** | | | | |
| Circus   | 0.220         | 0.117*           | −2.378        | 2.459           |
| Theatre  | 0.055         | 0.136            | −1.445        | 3.792           |
| Musician | 0.011         | 0.095            | −5.507        | 2.242***        |
| **Location [Base = Rest of World]** | | | | |
| Europe   | 0.119         | 0.098            | −2.001        | 4.484           |
| UK       | 0.156         | 0.098            | −3.903        | 4.245           |
| USA Canada | 0.256   | 0.085***         | −5.232        | 4.372           |
| **Profile** | | | | |
| Biography length | 0.046 | 0.012*** | 0.692 | 0.344** |
| Media    | 0.001         | 0.027            | −0.763        | 0.439*          |
| URLs     | 0.029         | 0.022            | 0.349         | 0.453           |
| Fans     | 0.292         | 0.056***         | 0.048         | 0.011***        |
| Albums   | 0.659         | 0.117***         | −0.562        | 0.704           |
| Gigs requested of them | 0.227 | 0.064*** | 0.444 | 0.454 |
| Joined platform post WHO announcement | 1.235 | 0.065*** | 1.111 | 1.565 |
| **Payment** | | | | |
| Card payment | 3.760 |  | 1.429*** | |
| Anonymous donor | −2.532 |  | 1.055** | |
| Card Payment#Anonymous donor | 4.628 |  | 1.585*** | |
| Constant | −2.177        | 0.135***         | 10.930        | 5.684*          |
| rho      | 0.125         | 0.067*           |               |                 |
| sigma    | 24.863        | 3.116***         |               |                 |
| lambda   | 3.115         | 1.619*           |               |                 |
| Observations | 6049 | | | |
| Selected | 2555         | | | |
| Not selected | 3494 | | | |
| Log pseudolikelihood | −13,080.17 | | | |
| BIC      | 26,447.69     | | | |
| Wald χ²(16) | 214.13 | | | |
| Prob > χ² | 0            | | | |
| Wald test of independence χ²(1) | 3.44 | | 0.064 |
| Classification accuracy | 93.49% | | | |

Data Source: The Busking Project

Maximum likelihood estimates with robust standard errors

Significance levels * = 10%; ** = 5%; *** = 1%
donations that other performers—but no location effects. There is also not a significant difference in donation amount between performers joining the platform pre or post the WHO announcement. Performers with more fans receive higher donations, and a longer biography on the performer’s profile increases donations. Apart from these two components, the other factors on the online profile do not have significant impacts on the donation amount just on the probability of donation. The payment method and whether the donor is anonymous have significant impacts on amount.

![Fig. 1 Estimated marginal effects for biography length. Estimated value—solid lines. Upper and Lower 95% confidence intervals—dotted lines](image)

| Table 5 Estimated marginal effects |
|-----------------------------------|
| Probability | SE | E (Donation) | SE | E (Donation) |
| Pr(Donation) | Donation in USD | SE | Donation in USD | SE |
| Musician | 0.416 | 0.004 | 12.465 | 0.727 | 10.765 | 0.714 |
| Circus | 0.442 | 0.010 | 15.482 | 1.556 | 13.626 | 1.337 |
| Theatre | 0.421 | 0.012 | 16.502 | 3.252 | 14.281 | 2.745 |
| Other genres | 0.415 | 0.010 | 17.978 | 2.056 | 15.462 | 1.759 |
| Europe | 0.414 | 0.006 | 16.114 | 1.420 | 13.983 | 1.257 |
| UK | 0.418 | 0.009 | 14.192 | 1.043 | 12.385 | 0.873 |
| USA Canada | 0.430 | 0.005 | 12.808 | 0.592 | 11.307 | 0.557 |
| Rest of the World | 0.401 | 0.008 | 18.183 | 4.230 | 15.565 | 3.661 |
| Joined platform pre-WHO announcement | 0.394 | 0.005 | 13.663 | 0.873 | 11.314 | 0.894 |
| Joined platform post WHO announcement | 0.615 | 0.016 | 14.146 | 0.794 | 13.216 | 0.725 |
donated. Relative to a known donor using a payment app (the reference donor type), a donation from a known donor making a card/PayPal donation is $3.76 higher, from an anonymous donor using a payment app is $2.53 lower, and from an anonymous donor using a card/PayPal is $2.09 higher.

To further investigate the impact of biography length, Fig. 1 presents the impact of biography length on both probability of donation and donation value, given a donation is made. We see that both are increasing with biography length. Table 5 presents the marginal impacts of genre on probability of donation and donation value, given a donation is made, and on the expected donation value. Although circus performers have the highest estimated probability of receiving a donation, musicians also have a relatively high probability. It is, however, clear that donation values are lower for musicians.

There are several significant findings arising from these results. Those artists who receive a donation are more likely to have joined the platform after the WHO pandemic announcement. They are more likely to be musicians and circus performers, but not theatre performers or other artists. The finding for audiences willing to pay more for circus performers is consistent with Zanola (2010) who studies circus attendance. Our results show musicians have a higher likelihood of receiving donations, but the donations they receive are smaller relative to the other artists. It is worth exploring in among buskers why musicians would receive more donations but in smaller amounts. As noted by Harrison-Pepper (1990), this can be explained by the nature of the performance. The art of busking is able to incorporate a ‘hat line’ into your performance, circus performers and theatre performers are more easily able to prime their audience to tip through their entire performance while musicians are limited in their ability to break their performance to ask for tips.

The profile information did offer insight into which artists would receive donations. As predicted and expected from previous studies, the number of fans does matter. This is for both the probability of receiving a donation and having more fans that do indeed increase the amount given. Social media engagement as evidenced by having more URLs on the profile is not linked to selection of receiving a donation nor to the amount given. Social media presence and fan engagement have proved critical for other crowd funder campaigns targeting music see for example (Åstebro, 2017; Mendes-Da-Silva et al., 2016; Mollick, 2014). Our results do not reflect this finding that social networks ties do help the artist. To some degree, this may reflect signalling theory as to who gets donations and who does not. Quality of information provided also plays a part in predicting online donations. Mollick (2014) and Moy et al. (2018) associated quality of information with the likelihood of success on crowdfunding platforms, but at an optimum point for word count. Profiles seeking donations that provide a rich descriptions and biographic information on crowdfunding platforms are proxies for quality see (Moy et al., 2018). Intriguingly, we find the more you write about yourself the more likely you are not only to receive a donation but for that donation to be larger in terms of amount, but the visual images or videos had no statistically significant relationship. The offering of other services such as the

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5 A hat line is the line buskers use to ask the audience for money.
number of gigs the artist was requested for and the number of albums did predict the probability of donations.

The method of payment combined with the option to leave an email for further engagement with the artists provides an interesting insight into the fans desire to be part of an artist’s community. We see this evidenced by the difference in amounts given by donors who leave an email give higher amounts, if donors use a credit card as opposed to newer forms of payments such as Android pay, and Apple pay. Building a fan base means connecting with the donors beyond the point of exchange. Our findings did not support Morris (2013) and Meiseberg (2014), the number of social media platforms was not associated with donations, and however, the number of fans did increase the likelihood of receiving a donation and higher dollar amounts. Meiseberg (2014) results did show social media engagement results important for the established artists rather than the emerging or independent artists; it could be that street performers would be considered in the category of emerging and independent artists. As stated by Kelly (2008), the key to a sustainable career is the artists relationship to the fans.

Whatever your interests as a creator are, your 1000 true fans are one click from you. As far as I can tell, there is nothing—no product, no idea, no desire—without a fan base on the internet. Everything made or thought of can interest at least one person in a million. The trick is to practically find those fans, or, more accurately, to have them find you.

Geography and proximity were influential in the successes of crowdfunding platforms which supports the previous findings see (Åstebro, 2017; Chan, et al 2018; Mendes-Da-Silva et al., 2016; Mollick, 2014). It should be noted that we only observe where the street performer initially registered on the platform, not where the donations are received. The pitch where the busker performs can be anywhere in the world (Ho & Au, 2018). We do find that artists who registered in UK or USA have significantly higher probabilities of receiving a donation, compared to Europe and other parts of the world. But the locations have no influence over the amount of donations a performer receives.

8 Conclusion

The platform (https://busk.co) provides a rich networking source for buskers with the opportunity for performers to engage with fans, message fans, sell albums, and set up networks with other buskers around the world. Interestingly, we find that donors who offer an email on their donation are more likely to give more; this speaks to the fans desire to connect not just to the artists performance but to join the community wanting to build a relationship with the artist. The data predict musicians are more likely to receive a donation than other artist, but the amount they receive is lower than circus performers. Zanola (2010) also finds similar relationships with ticketed circus performances, whereby audiences reveal a positive price elasticity. Location sites matters for the probability of receiving a donation by not for the amount received. The most revealing finding is that the number of fans an artist has matters for both receiving a donation
and the amount the artists they receive. Possibly indicating a bandwagon effect with fan ‘likes’ serves as a proxy for artist quality to other potential donors.

The exchange for money between a street performer and an audience is a changing landscape. As less cash is carried on people’s person and audiences want to participate in exchange, the industry is ripe for disruption. Our results reflect the findings of and Moy et al. (2018) with a nonlinear relationship between word count and donations. Not only did the amount a performer wrote on the platform influence the likelihood of donation, but it also increased the amount the performer received. Like Meiseberg’s (2014) finding on social media engagement emerging and independent folk singers, street performers in our study did not find more URLs on their page associated with higher levels of income. The new means of digital access available to the artist (Morris, 2013; Peukert, 2019) could potentially allow street performers to generate more generous donations online beyond cash tips.

These findings are important as creative and cultural industries move towards more entrepreneurship for artists to survive; street performers are often neglected from funding models but are a vital part of the creative ecosystem as a means of market testing and creation. The platform model is a direct means for fans and artists to interact and build that all important fan base but community of like-minded people appreciating the artist which ultimately can help to sustain an artist’s career. The dying nature of cash transactions has implications beyond just the busking community. Cash has dominated the exchanges between artists and fans for centuries, but the rise of digital exchange wider implications this is to some extent the last bastion of the cash domain.

Finally, we note a limitation of our study and a suggestion for future research. While we can comment on online profiles in this study, there are no socio-demographic variables available for the artists such as age, gender, and education which would provide richer information on the characteristics of the artist beyond their online presence. Our results have shown that performers who joined the platform after the WHO announcement of COVID-19 as a pandemic have a higher probability of receiving a donation. In future work, it would be of interest to investigate whether activity on the platform has changed as a result of COVID-19.

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Declarations

Conflict of interest The authors declare that they have no conflict of interest.

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