Author’s Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.
Abstract

Research about choir and community wellbeing shows that there is a positive association between the two constructs. In addition, the positive association between choir participation and community wellbeing seems to be stronger if the activity fosters a place to socialize and gain an identity through the leisure pursuit. This research looks at the relationship between choir participation and community wellbeing using Social Identity Approach (SIA). SIA suggests that participants benefit from a leisure activity to the degree in which they identify themselves with the group. This research takes SIA into consideration to explain the positive relationship between choir participation and community wellbeing, where social opportunities and social identity mediates the positive association between participating in a choir and community wellbeing. A serial mediation model was designed to test the positive association between the two variables. Social opportunities and social identity were added to the mediation model to test their indirect effect on choir participations positive effect on wellbeing. Social opportunities variable was placed as the antecedent variable to consequent variable of social identity. Findings show that choir participation is positively associated to community wellbeing. In addition, results show that the positive effect is fully mediated by social opportunities and social identity provided by the choir.

Keywords: choir, leisure, community wellbeing, social identity approach
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1.0 Introduction

Choirs are a common form of leisure activity and often share similar characteristics including a fairly constant membership, regular rehearsals, occasional performances, a chosen repertoire and a musical director (Ahlquist, 2006). In Ontario, Canada, 1.6 million residents sang in a choir in 2016 (Hill, n.d.). Previous research about choirs mainly focused on the individuals’ wellbeing and found that there is a positive association between choir participation and wellbeing (Bailey & Davidson, 2002, 2005; Clift et al., 2010; Cohen et al., 2006). Considering choir’s popularity as a leisure activity, these results align with the previous findings of leisure participation’s positive association to wellbeing (Iso-Ahola & Mannell, 2004; Mannell, 2007). In the literature the focus on individuals’ wellbeing and choir participation is evident but further research is needed to examine the relationship between choir participation and community wellbeing.

Wellbeing is recognized as a subjective phenomenon, which reflects how people think about, feel about and assess their lives (Dolan, Peasgood, & White, 2008). Research on community wellbeing (CWB) should take individuals’ wellbeing into consideration. “CWB is the combination of social, economic, environmental, cultural, and political conditions identified by individuals and their communities as essential for them to flourish and fulfil their potential” (Wiseman & Basher, 2008, p. 358).

Social identity helps us understand the inseparable connectedness between the self and the group that the self is a part of. Social identity is a social groups’ perception of who they are, how they identify themselves and how they relate to and differ from other social groups (Hogg, Abrams, Otten & Hinkle, 2004). Social Identity Approach (SIA) theorizes that one’s perceived benefits from a social activity is significantly associated to the degree in which they identify
themselves with the group (Jetten et al., 2015). Previous findings about the factors that affect the positive association between choir participation and wellbeing, such as self-esteem (Bailey & Davidson, 2002), were also found in various research on social identity approach (Jetten et al, 2015, 2017). Which means that social identity can uniquely contribute to the positive relationship between choir participation and wellbeing. This also means that social identity has the potential to contribute to CWB, due to individuals’ wellbeing impact on CWB.

The purpose of this research is, first, to test if choir participation is positively associated to CWB. And secondly, to consider to what extent do social opportunities and social identity mediate the positive relationship between choir participation and CWB, as guided by SIA.

This research hypothesis that choir participation is positively associated to CWB. In addition, this research proposes that the positive association between choir participation and CWB is mediated by social opportunities and social identity gained through choir participation.
Figure 1

A statistical diagram of the serial multiple mediator model for the choir participation’s association to CWB through social opportunities and social identity
2.0 Literature Review

Previous research about choirs shows that choir participants can benefit physically (Beck, Cesario, Yousefi, & Enamoto, 2000; Grape, Sandgren, Hansson, Ericson, & Theorell, 2002) and psychologically (Bailey & Davidson, 2002, 2005; Clift et al., 2010; Cohen et al., 2006) from their leisure pursuit. Johnson, Louhivouri and Siljander (2017) found that older adults who participated in a choir reported higher levels of wellbeing in compared to older adults from the general population in Finland. This result aligns with multiple other previous research on choir participation’s positive association to wellbeing (Clift & Hancox, 2001; Clift & Morrison, 2011; Livesey, Morrison, Clift & Camic, 2012).

Wellbeing and community wellbeing (CWB) are two constructs that are conceptually linked (Kimweli & Stilwell, 2002; Sirgy, Widgery, Lee & Yu, 2010). Choir participation’s association to CWB is a less examined subject. Previous findings show that there might be a positive association between choir participation and CWB, where participants reported connectedness to their community at large through singing and feeling a sense of belonging (Gridley, Astbury, Sharples & Aguirre, 2011).

Multiple theories have been used for exploring this topic, however one theory in particular seems to add to our understanding of leisure and wellbeing. Social Identity Approach (SIA), which guides this research, helps understanding the relationship between choir participation and wellbeing. SIA predicts that individuals benefit from participating in leisure activities differently. Participants perceived benefits from a social activity is associated to the degree in which they identify themselves with the group (Jetten et al., 2015). Choir is a social activity by its nature. Wellbeing benefits gained from choir participation can possibly be dependent to the degree in which choir participants identify themselves with the group.
The current research will test the positive association between choir participation and CWB. Then, the current research will test social opportunities and social identity’s unique contributions to the positive association between choir participation and CWB.

2.1 Choir and Community Wellbeing

2.1.1 Choir

Choirs are a common form of leisure and music engagement activity. They often share similar characteristics including a fairly constant membership, regular rehearsals and occasional performances, a chosen repertoire, a musical director (Ahlquist, 2006). Depending on the commitment of choir participants, frequency of choir practices can range between more than once a week to as seldom as once a month.

2.1.2 Wellbeing & Community Wellbeing

Wellbeing is recognized as a subjective phenomenon, which reflects how people think about, feel about and assess their lives (Dolan, Peasgood, & White, 2008). Subjective Wellbeing (SWB) is defined as a general area of research activity and interest instead of a specific psychological construct (Diener, Suh, Lucas, & Smith, 1999). Research about wellbeing has referred the construct as wellbeing, subjective wellbeing (SWB) or quality of life (QOL) in the literature. When measuring QOL or SWB, researchers can refer to several psychological constructs such as happiness, life satisfaction, perceived QOL, domain satisfaction, hedonic wellbeing (Uysal, Sirgy, Woo & Kim, 2016) and eudaimonic wellbeing (Ryan & Deci, 2001). Flexibility and range of the interest area is one of the reasons why these terms were used interchangeably (Uysal, Sirgy, Woo & Kim, 2016) in the literature by the scholars who are doing research in this area of interest. Wellbeing is associated to many important life domains (Kansky
& Diener, 2017), one of which is social relationships (Lyubomirsky, King, & Diener, 2005; Oishi, Diener, & Lucas, 2007).

Previous research has found that a conceptual link between WB and CWB is empirically evident (Kimweli & Stilwell, 2002; Sirgy, Widgery, Lee & Yu, 2010). “CWB is the combination of social, economic, environmental, cultural, and political conditions identified by individuals and their communities as essential for them to flourish and fulfil their potential” (Wiseman & Basher, 2008, p. 358).

2.1.3 Choir & CWB

Most musical activities are social by its nature (MacDonald, Kreutz & Mitchell, 2013), and participation in choir is not an exception. Choirs require a group of people singing simultaneously and in harmony. Research about choirs shows that there is a positive association between choir participation and multiple facets of wellbeing (Bailey & Davidson, 2002, 2005; Clift et al., 2010; Cohen et al., 2006). In addition, social component of music engagement seems to be a key factor contributing to the positive outcomes for wellbeing (Joseph & Southcott, 2014, 2015). Previous research participants reported that choir participation made them feel as part of a community and therefor, improved their wellbeing (Gridley, Astbury, Sharples & Aguirre, 2011).

Singing, which is one of the primary attributes of choir participation, is considered as a mode that brings people together, offering social support and improving participants wellbeing (Theorell, 2014). People who sang with others reported higher subjective wellbeing scores compared to people who sang alone (Weinberg & Joseph, 2017). Research on group singing shows that engaging in group singing can help to enhance social support, develop positive relationships and reduce feeling of social isolation for participants. (Bailey & Davidson, 2002,
2005; Clift & Morrison, 2011; Pérez-Aldeguer & Leganés, 2014; Teater & Baldwin, 2012). In addition, previous research shows that singing enabled faster social bonding compared to other creative activities (Pearce, Launay & Dunbar, 2015).

2.1.4 Leisure & CWB

Choirs are a common form of leisure activity and there is a significant association between leisure participation and wellbeing (Mannell, 1999). Leisure can positively contribute to health and wellbeing (Iso-Ahola & Mannell, 2004; Mannell, 2007). Choir participation specifically, can contribute to wellbeing because of its physical (Beck, Cesario, Yousefi, & Enamoto, 2000) and psychological benefits (Bailey & Davidson, 2002, 2005; Clift et al., 2010; Cohen et al., 2006; Grape, Sandgren, Hansson, Ericson, & Theorell, 2002; Gridley, Astbury, Sharples & Aguirre, 2011).

Previous research shows that choir participants perceive attending choir practices and performances as a social experience as much as a musical experience (Southcott & Joseph, 2015). The communal interaction in the choir can offer choir participants a purpose and sense of belonging (Creech, Hallam, Varvarigou, & McQueen, 2014). Entitativity, refers to the extent that a group of individuals is perceived as a coherent group (Campbell, 1958, Crawford & Salaman, 2012). Practicing towards a goal such as a performance can lead choir members to experience entitativity. Recent studies have shown that groups with higher degrees of perceived entitativity are more likely to meet the affiliation and achievement needs of their members (Crawford & Salaman, 2012; Johnson et al., 2006). Experiencing entitativity can be another factor that explains choir participation’s positive association to CWB. A large majority of choir participants experience social and emotional benefits from attending to choir practices and performances (Clift & Hancox, 2001).
2.2. Choir and Social Opportunities

Increase in the reported wellbeing levels through choir participation can potentially occur due to the activity’s social nature where singing in a choir can provide individuals the space to form meaningful relationships, which in return can provide social support. Previous research suggests that social component of music engagement is a key factor contributing to the positive outcomes for wellbeing (Joseph & Southcott, 2014, 2015). Music and choirs can contribute to the development of a sense of place and belonging (Duffy, 2005) and help people participate actively in social activities (Davis, 1992). For the purpose of the current research, the space that is provided through choir to form social bounds and meaningful relationships will be measured as social opportunities.

2.3 Social Identity Approach

Literature on the topic shows that diverse theories were used to understand the positive association between choir participation and wellbeing. One theory in particular, Social Identity Approach (SIA), adds to our understanding of leisure and wellbeing. SIA helps understanding the positive association between choir participation and wellbeing in particular.

Research conducted within different disciplinary domains such as sociology, epidemiology and psychology show that social relations and group membership are linked to health and wellbeing (Cohen, 2004; Jetten et al., 2017). Positive social relationships and being a member of a group which fosters prosocial behaviour can impact the individual’s self-esteem, belonging, meaning, a sense of purpose, control and efficacy in life (Cruwys, Haslam, Dingle, Haslam, and Jetten, 2014; Jetten et al, 2015, 2017), which in return can make individuals healthier (Greenaway et al.,2015) and improve their wellbeing.
However, there are varying factors which can affect how each individual perceives and experiences the social group. For example, research in this area shows that group leaders are more aligned with the identity of the group (Ellemers, De Gilder, & Haslam, 2004). In return, group leader is more likely to experience the benefits of the social group. Therefore, not all participants benefit from being part of a social group equally. The degree of benefits that are gained through social relationships are not constant and can change depending on varying factors. Social relationships that we benefit from has to be based on cooperation, trust and mutual support in order to be beneficial (Sani, 2012).

2.3.1 Social Identity Approach

Social identity is a social groups’ perception of who they are, how they identify themselves and how they relate to and differ from other social groups (Hogg, Abrams, Otten & Hinkle, 2004). Factors, which are described in the previous section, that explain the positive association between choir participation and wellbeing such as self-esteem and sense of belonging are strongly associated to social identity (Jetten et al, 2015; Jetten et al., 2017).

SIA is guiding this research to explain the positive relationship between choir participation and wellbeing, where the social opportunities and identity gained through leisure participation can lead to higher levels of wellbeing.

SIA is based on two related theories; social identity theory (SIT) (Tajfel & Turner, 1979, 1986) and self-categorization theory (SCT) (Turner, 1985; Turner, Hogg, Oakes, Reicher & Wetherick, 1987).

Previous research shows that social relationships are a significant and independent contributor to one’s wellbeing. SIT refers to one’s perception of self that is acquired from being a member of a social group (Tajfel, 1978; Tajfel & Turner, 1979; Jetten, Haslam & Haslam,
How one perceives the social group that they identify themselves with, shapes the way they form their social identity and internalizes the group identity.

SCT is concerned with what makes individuals categorize themselves in a group rather than as an individual. Both theories were developed to theorize how individuals make decisions based on their identity. Both theories suggest that one can make decision based on group identity, since humans tend to generate a self-perceived identity which is a combination of self, an intermediate level group (a social group) and a human.

According to SIA, individuals benefit from participating in leisure activities differently. One’s perceived benefits from a social activity is significantly associated to the degree in which they identify themselves with the group (Jetten et al., 2015). One has the possibility to enhance sense of belonging through activity participation if it is an internalized part of a participant’s self-concept. In order for social relationships to have a positive effect on wellbeing, relationships should be internalized (Jetten et al., 2017). This association can be enhanced with the degree that the participant identifies with the group.

2.3.2 Choir and Social Identity

Research about choir participation and wellbeing shows that choir participation is positively associated to wellbeing (Bailey & Davidson, 2002, 2005; Clift & Hancox, 2001; Clift et al., 2010; Clift & Morrison, 2011; Cohen et al., 2006; Grape, Sandgren, Hansson, Ericson, & Theorell, 2002). In addition, previous findings show that this positive association can be mediated by self-esteem, sense of belonging, meaning, a sense of purpose, control and efficacy in life (Cruwys, Haslam, Dingle, Haslam, and Jetten, 2014; Jetten et al, 2015; Jetten et al., 2017) and some of these factors are correlated to social identity.
2.3.3 Social Opportunities and Social Identity

In the current research, social opportunities represent participant’s perception of opportunity to socialize. Social identities are formed through a group’s perception of themselves and the others, therefore without a group a social identity can’t form. This research suggests that the more likely participants are to perceive choir participation as an opportunity to socialize, the more likely they are to identify themselves with the group.

2.3.4 Social Opportunities and Community Wellbeing

Social isolation is an increasing concern for communities around the world. Previous research found that social isolation is associated to higher rates of morbidity and mortality in lonely older adults (Cacioppo & Cacioppo, 2014). In addition, social isolation increases the likelihood that a person will act in a more defensive and self-protective fashion (Cacioppo & Hawkley, 2005, 2009) and in return will undermine the chances to form better connections with others (Cacioppo & Cacioppo, 2014). This defense mechanism has the potential to affect participants perception of communities that they live in. This research predicts that the more likely a person perceives choir as an opportunity to socialize, the more likely they are to report higher levels of community wellbeing.

2.3.5 Social Identity and Community Wellbeing

As suggested by SIA, wellbeing of individuals can improve in accordance with internalization of a group’s identity. As stated previously in this section, CWB and WB are two constructs that are conceptually linked (Kimweli & Stilwell, 2002; Sirgy, Widgery, Lee & Yu, 2010). This research predicts a positive association between social identity and CWB.
2.3 Summary

This research proposes that the positive relation between choir participation and CWB is mediated by social support and social identity gained from participating in the choice of leisure pursuit, which is choir. Social support, and social identity mediators are determined by SIA and can explain the positive relation between choir participation and wellbeing.

The gap in the literature shows that, a theoretically grounded explanation is needed to explain the mechanisms that affect the positive association between choir participation and wellbeing. Thus, SIA will be used to help show a potential explanation of the positive relationship between choir participation and wellbeing.

The current research suggest that SIA can explain the mechanism which contribute to positive effect of choir participation on wellbeing. First of all, this research will test the positive relationship between choir participation and wellbeing. Then, guided by SIA, the current research will test the contribution of social opportunities and social identities on positive association between choir participation and wellbeing.
3.0 Purpose of the Study

The purpose of this research is to test the positive relationship between choir participation and CWB. In addition, the purpose of this research is to test how, drawing on the social identity approach, that social opportunities and social identity mediates the positive relationship between choir participation and CWB.

3.1 Hypotheses

The hypotheses that are being tested through this research are;

There is a positive relationship between choir participation and CWB.

Social opportunities and social identity positively mediate the relationship between choir participation and CWB.
4.0 Method

4.1 Data Source

Data were drawn from the 2002 Household Surveys data set made available by Performing Arts Research Coalition (Performing Arts Research Coalition, 2002). Data is hosted and made publicly available by ICPSR in University of Michigan. Surveys were conducted in ten communities across the United States of America which are: Alaska, Cincinatti, Denver, Pittsburgh, Seattle, Austin, Boston, Minneapolis/St. Paul, Sarasota and Washington D.C. Primary focus of the survey was to collect data on a series of topics related to attendance at performing arts events such as rates of participation in arts, perceived value of the performing arts to individuals and to communities and barriers to greater attendance.

Benefit of using secondary data for this research was to obtain data from a large sample size with cost and time efficiency.

On the other hand, primary focus of the available dataset is different than the purpose of the current research. Therefore, secondary dataset can limit the extent to which measures directly relate to current research’s variables.

4.2 Sample

Data was collected in 2002. Phone surveys were used for collecting data from 10 communities across the USA. Total of 8161 individuals participated in the survey.

4.3 Variables

4.3.1 Demographic

Sex is coded as male (1) and female (0). Age of the participants were coded as discrete variables on a scale from 18 to 97 and older. Married (1) indicates that the participant is married, living as married or have a domestic partner compared to not married, not living as married or
not living with a domestic partner (0). Education is denoted as participant having a college diploma or higher level of academic degree (1) and no college diploma (0). Income indicates an annual income of: less than $25,000 (1), $25,000 to under $50,000 (2), $50,000 to under $100,000 (3), $100,000 to under $150,000 (4), $150,000 or more (5). Ethnicity of the participants is coded as white (1) and not white (0). Lastly, children (1) indicates that participants had one or more children compared to not having any children (0).

4.3.2 Choir Participation

Participants were asked how often, on average, they participate in singing in a choir or singing group. The options were every day (1), at least once a week (2), at least once a month (3), seldom (4), never (5), don’t know (8) and refused to answer (9) (Performing Arts Research Coalition 2002: Household Surveys, Performing Arts Research Coalition, 2002). Since focus of this research is to understand how choir participation affects wellbeing, participants who responded as every day, at least once a week, at least once a month and seldom for choir participation frequency were recoded as active (1) and participants who responded never were recoded as not active (0).

4.3.3 CWB

CWB was assessed with responses to the question, “The performing arts improve the quality of life in [community]. Do you strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree with this statement?” Response options ranged from strongly agree (1) to strongly disagree (5). Responses were reverse coded to strongly disagree (1) to strongly agree (5), so that the higher values corresponded to higher levels of wellbeing.
4.3.4 Social Opportunities

Social support was assessed with responses to the question “The performing arts provide opportunities to socialize with other people. Do you strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree with this statement?” Response options ranged from strongly agree (1) to strongly disagree (5). Responses were reverse coded to strongly disagree (1) to strongly agree (5).

4.3.5 Social Identity

Participants identification with the group was measured by two questions. The first question is “The performing arts are a source of pride for those in [community]. Do you strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree with this statement?” Response options ranged from strongly agree (1) to strongly disagree (5). Responses were reverse coded to strongly disagree (1) to strongly agree (5).

The second question is “The performing arts help preserve and share cultural heritage. Do you strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree with this statement?” Response options ranged from strongly agree (1) to strongly disagree (5). Responses were reverse coded to strongly disagree (1) to strongly agree (5).

Lastly, responses to these two questions were combined into a composite variable by computing the mean of pride and heritage variables response values.

4.4 Analysis

4.4.1 Design

In order to test the positive relationship between choir participation, wellbeing and potential mediators of social opportunities and social identity, a serial mediation model was
constructed. A statistical diagram of the mentioned serial multiple mediator model can be seen below (Figure 1).

Figure 2
A statistical diagram of the serial multiple mediator model for the choir participation’s association to CWB through social opportunities and social identity

4.4.2 Frequencies and Skewness
First of all, frequencies, means and percentages of all variables that would be included in the regression model were calculated using SPSS software (IBM Corp., 2017). In addition to calculating frequencies, normality test was done on the same variables to check if any results were positively or negatively skewed.

4.4.3 Correlation
Secondly, a bivariate correlation analysis was conducted in SPSS to calculate if the focal, criterion and mediator variables were significantly related to each other. This analysis results show if the variables that are included in the regression analysis were significantly associated to each other.
4.4.4 Linear Regression and Mediation Analysis

A serial mediation model rejects the assumption that no causal association between two mediators exist (Hayes, 2017). This research suggests that a participant’s perception of identifying with a group is associated to perceiving the activity as an opportunity to socialize. Therefore, a serial mediation model was used to test this hypothesis.

To understand the potential role of social opportunities and social identity in explaining any statistically significant associations between choir participation and wellbeing, social opportunities and identification were tested as the mediators using model 4 outlined by Hayes (Hayes, 2017). The serial mediation model was tested by using PROCESS macro (Hayes, 2017) in SPSS software. Instead of computing each path individually, PROCESS allows the researcher to compute all direct and indirect effects simultaneously.

Serial mediation analysis was used for testing the three paths in the regression model. The first path examines choir participation’s association to wellbeing mediated by social opportunities \((a_1 + b_1)\). The second path examines choir participation’s association to wellbeing mediated by social identity \((a_2 + b_2)\). The third path examines choir participation’s association to wellbeing mediated by social opportunities and social identity, with social opportunity variable being antecedent variable to consequent variables social identity \((a_1 + d_{21} + b_1)\).

When computing the regression for each model, PROCESS takes all control variables into account. This allows the researcher to interpret each variable’s unique contribution to the criterion variable.
5.0 Results

5.1 Descriptive Statistics

The average age of the sample was 44.94 (Table 1). Men made up 46.01% of the sample. Almost 63% of the participants were married and around 44% of the participants had a college diploma or higher. 15.75% of the participants were earning under 25000 $ per year, 28.31% of the participants were earning between 25000 $ and 50000 $, 36% of the participants were earning between 50000 $ and 100000 $, 13.33 % of the participants were earning between 100000 $ and 150000 $ and lastly 6.6% of the participants were earning more than 150000 $ a year. Approximately 15% of the sample responded that they participated in a choir actively. Approximately 83% of the sample declared their ethnicity as white. In addition, 39% of the participants had one or more children. Most participants responded that they somewhat to strongly agree that performing arts are a source of pride (M = 4.35, SD = 0.87) and that performing arts help preserve and share cultural heritage (M = 4.49, SD = 0.77). Composite variable of identification showed that participants somewhat to strongly agree that performing arts can help identification with the group (M = 4.41, SD = 0.71). Participants somewhat to strongly agree that performing arts can provide social opportunities to socialize with other people (M = 4.41, SD = 0.79). Participants somewhat agreed that performing arts can improve quality of life of the participants (M = 4.41, SD = 0.83).

No significant skewness was observed on normality tests. All variable response distributions were skewed equal to or less that 2.003.
Table 1

Means and Percentages of Demographics, Choir Participation, Social Opportunities, Social Identity and CWB

<table>
<thead>
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<tr>
<td>Quality of Life</td>
<td>7870</td>
<td>4.41</td>
<td>0.83</td>
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</table>
5.2 Correlation Analysis

Correlation analysis (Table 2) showed that choir participation, social opportunities, social identity and CWB were all significantly associated to each other. Significance of association to CWB were stronger for social factors in compare to leisure participation.

Age, identifying as a male, having a higher income and identifying as white had significance in association to participating in a choir. Social opportunities had no significant correlation to any other control variables except for age and identifying as a male. Age, identifying as a male, having a higher education and identifying as white had significance in association to reporting higher levels of CWB.
Table 2

Correlation of Demographics, Choir Participation, Social Opportunities, Social Identity and CWB

<table>
<thead>
<tr>
<th>Variables</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
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<tbody>
<tr>
<td>Age</td>
<td>---</td>
<td>-.06***</td>
<td>.03**</td>
<td>-.01</td>
<td>-.01</td>
<td>-1.4***</td>
<td>-.33***</td>
<td>-.03**</td>
<td>-.04***</td>
<td>.04**</td>
<td>.09***</td>
</tr>
<tr>
<td>Male</td>
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<td>---</td>
<td>.04***</td>
<td>.03**</td>
<td>.1***</td>
<td>-.04**</td>
<td>.05***</td>
<td>-.03**</td>
<td>-.09***</td>
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<td>-.13***</td>
</tr>
<tr>
<td>Married</td>
<td>.03**</td>
<td>.04***</td>
<td>---</td>
<td>.08***</td>
<td>.37***</td>
<td>-.07***</td>
<td>.26***</td>
<td>-.01</td>
<td>-.01</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>College Education</td>
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<td>.03**</td>
<td>.08***</td>
<td>---</td>
<td>.34***</td>
<td>.69***</td>
<td>-.02**</td>
<td>-.01</td>
<td>-.01</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>Income</td>
<td>-.01</td>
<td>.1***</td>
<td>.37***</td>
<td>.34***</td>
<td>---</td>
<td>.09***</td>
<td>.13***</td>
<td>-.06***</td>
<td>.01</td>
<td>.02*</td>
<td>.01***</td>
</tr>
<tr>
<td>White</td>
<td>.14***</td>
<td>-.04**</td>
<td>.07***</td>
<td>.69***</td>
<td>.09***</td>
<td>---</td>
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<td>-.08***</td>
<td>.01</td>
<td>.04***</td>
<td>.08***</td>
</tr>
<tr>
<td>Children</td>
<td>-.33***</td>
<td>-.05***</td>
<td>.26***</td>
<td>-.02*</td>
<td>.13***</td>
<td>-.07***</td>
<td>---</td>
<td>.02*</td>
<td>.01</td>
<td>-.01</td>
<td>-.05**</td>
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<tr>
<td>Choir Participation</td>
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<td>-.03**</td>
<td>-.01</td>
<td>-.01</td>
<td>-.06***</td>
<td>-.08***</td>
<td>.02*</td>
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<td>.04**</td>
<td>.06***</td>
<td>.03*</td>
</tr>
<tr>
<td>Social Opportunities</td>
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<td>-.09***</td>
<td>-.01</td>
<td>-.01</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
<td>.04**</td>
<td>---</td>
<td>.47***</td>
<td>.34***</td>
</tr>
<tr>
<td>Social Identity</td>
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<td>.01</td>
<td>.07***</td>
<td>.02*</td>
<td>.04***</td>
<td>-.01</td>
<td>.06***</td>
<td>.47***</td>
<td>---</td>
<td>.56***</td>
</tr>
<tr>
<td>CWB</td>
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<td>.01</td>
<td>.19***</td>
<td>.01***</td>
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<td>-.05**</td>
<td>.03*</td>
<td>.34***</td>
<td>.56***</td>
<td>---</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, *** p < .001
5.3 Regression and Mediation Analysis

Regression analysis (Table 3) was done for testing the three paths in the regression model. Antecedent variable choir participation’s effect on consequent variable social opportunities ($a_1$ path) was .079. Antecedent variable social opportunity’s effect on consequent variable CWB ($b_1$ path) was .120. Antecedent variable choir participation’s effect on consequent variable social identity ($a_2$ path) was .090. Antecedent variable social identity’s effect on consequent variable CWB ($b_2$ path) was .570. Lastly, antecedent variable social opportunity’s effect on consequent variable social identity ($d_{21}$ path) was .406.

Results show that age and identifying as a male were significantly associated to reporting higher levels of CWB. Being married, level of education, income, ethnicity or having children did not have a significant association with CWB scores. Results show that choir participation has a significant positive association with CWB when all control variables and no mediators were taken into consideration and added to the calculation.

All models showed a significant change in $R^2$ which indicates that adding a variable change the direct effect of focal variable on criterion variable significantly.

First model shows the direct effect of choir participation on CWB. Choir participation shows slight but significant positive association to CWB.

Second model shows the indirect effect of choir participation on CWB, when only social opportunities variable is taken into consideration as a mediator. When choir participants perceived choir as a social opportunity, they were more likely to report higher levels of CWB. Social opportunities partially mediated the positive effect of choir participation on CWB.

Third model shows the indirect effect of choir participation on social identity, when social opportunities variable is taken into consideration as a mediator. When choir participants
perceived choir as a social opportunity, they were more likely to identify themselves with the group.

The fourth model shows the indirect effect of choir participation on CWB, with social opportunities and social identity is taken into consideration as mediators. In this model, social opportunities are antecedent to social identity, which predicts that one should perceive the experience as a social opportunity to identify with the group. When both mediators of social opportunities and social identity were taken into account the positive effect of choir participation on CWB was full mediated.
Table 3
Regression Coefficients, Standard Errors, and Model Summary Information for the presumed choir participation’s association to CWB through social opportunities and social identity

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Consequent</th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>CWB</td>
<td>Social Opportunity</td>
<td>Identity</td>
<td>CWB</td>
</tr>
<tr>
<td>Antecedent</td>
<td>Coeff.</td>
<td>SE</td>
<td>Coeff.</td>
<td>SE</td>
<td>Coeff.</td>
</tr>
<tr>
<td>Constant</td>
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<td>0.046</td>
<td>4.545***</td>
<td>0.045</td>
<td>2.501***</td>
</tr>
<tr>
<td>Age</td>
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<td>0.001</td>
<td>-0.002**</td>
<td>0.001</td>
<td>0.003***</td>
</tr>
<tr>
<td>Male</td>
<td>-0.204***</td>
<td>0.020</td>
<td>-0.144***</td>
<td>0.020</td>
<td>-0.145***</td>
</tr>
<tr>
<td>Married</td>
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<td>-0.005</td>
<td>0.022</td>
<td>0.032</td>
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<tr>
<td>College Education</td>
<td>0.284***</td>
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<td>-0.029</td>
<td>0.021</td>
<td>0.096***</td>
</tr>
<tr>
<td>Income</td>
<td>0.035***</td>
<td>0.010</td>
<td>0.015</td>
<td>0.010</td>
<td>-0.004</td>
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<tr>
<td>White</td>
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<td>0.028</td>
<td>0.019</td>
<td>0.027</td>
<td>0.034</td>
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<tr>
<td>Children</td>
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<td>0.006</td>
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<tr>
<td>Choir Participation</td>
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<td>0.028</td>
<td>0.079*</td>
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<td>0.090***</td>
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<td>---</td>
<td>---</td>
<td>0.406***</td>
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<tr>
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<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Adjusted R²</td>
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<td>0.012</td>
<td>0.242</td>
<td>0.348</td>
<td></td>
</tr>
</tbody>
</table>

n= 8165; *p < 0.05, **p < 0.01, ***p < 0.001.
Figure 3

A statistical diagram showing the direct and indirect effects of the serial multiple mediator model for the choir participation’s association to wellbeing through social opportunities and social identity.

* p < .05, ** p < .01, *** p < .001
6.0 Discussion

The current research tested the positive association between choir participation and CWB. In addition, by interpreting SIA (Jetten, Haslam & Haslam, 2012) in leisure context, the current research tested how social opportunities and social identity mediators explained the positive relationship between choir participation and CWB. Findings show that choir participation is significantly associated to CWB. In addition, social opportunities and social identity mediators fully mediated the positive association between choir participation and CWB.

The current research was able to build on previous findings in the literature, such as social factors being a key component in benefits of participating in a choir (Southcott & Joseph, 2015) and by using SIA, explain the positive relationship between leisure participation and CWB using a theoretical model.

In addition to this, current research’s findings show that in addition to providing social opportunities for the participants (Davis, 1992), participants who perceive choir as a social opportunity were more likely to report higher levels of CWB. Findings in the current research shows that social opportunities partially mediated the positive effect of choir participation on CWB.

The current research findings of positive association between choir participation and CWB being partially mediated by perceiving choir group as part of participants’ identity aligns with the SIA (Jetten, Haslam & Haslam, 2012). Gaining an identity through participant’s leisure pursuit, indeed, positively affected reported levels of wellbeing.

6.1 Limitation

The first limitation of this study roots from the nature of the data. The nature of secondary data limits the extent to which survey questions directly relates to the variables.
Measures in the survey weren’t designed to measure the association between choir participation, social opportunities, social identity and CWB, therefore the extent to which this researches extent to represents the details of constructs is limited.

Another limitation, that is rooted from the data source, is that the responses were self-reported and therefore could be subjected to biases such as selective memory or exaggeration.

Lastly, the association between the variables can only be made in a specific point in time, due to data being collected in one point in time and being cross sectional.

6.2 Future Research and Implications

There are several ways in which this study can lay a foundation for. First of all, future research should keep looking at unique predictors that may in which mediate the positive effect of choir participation on CWB. It is evident that social relationships and group membership is associated to CWB in leisure and choir context.

6.3 Conclusion

The current research adds to the bodies of literature focused on choir, leisure, community wellbeing and SIA. The current research shows that the first hypothesis, which is choir participation is positively associated to CWB, is correct. The current research shows that there is a positive association between choir participation and CWB. In addition, the second hypothesis, social opportunities and social identity explain the positive relationship between choir participation and CWB. The current research shows that positive association can be mediated by choir participants’ perception of the leisure activity as a social opportunity and the degree in which they identify themselves with the group.
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